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ABSTRACT

This inventory consists of three sections. A core section contains titles and descriptive information on educational materials categorized according to medium. Two other sections, "grade level" and "subject," are cross indexes of items for which citations appear in the core section. Citations contain information normally used by libraries to purchase current material, plus a short annotation. A typical entry also includes date of publication, name of author or producer, cost, and grade level suitable. (Author/RE)

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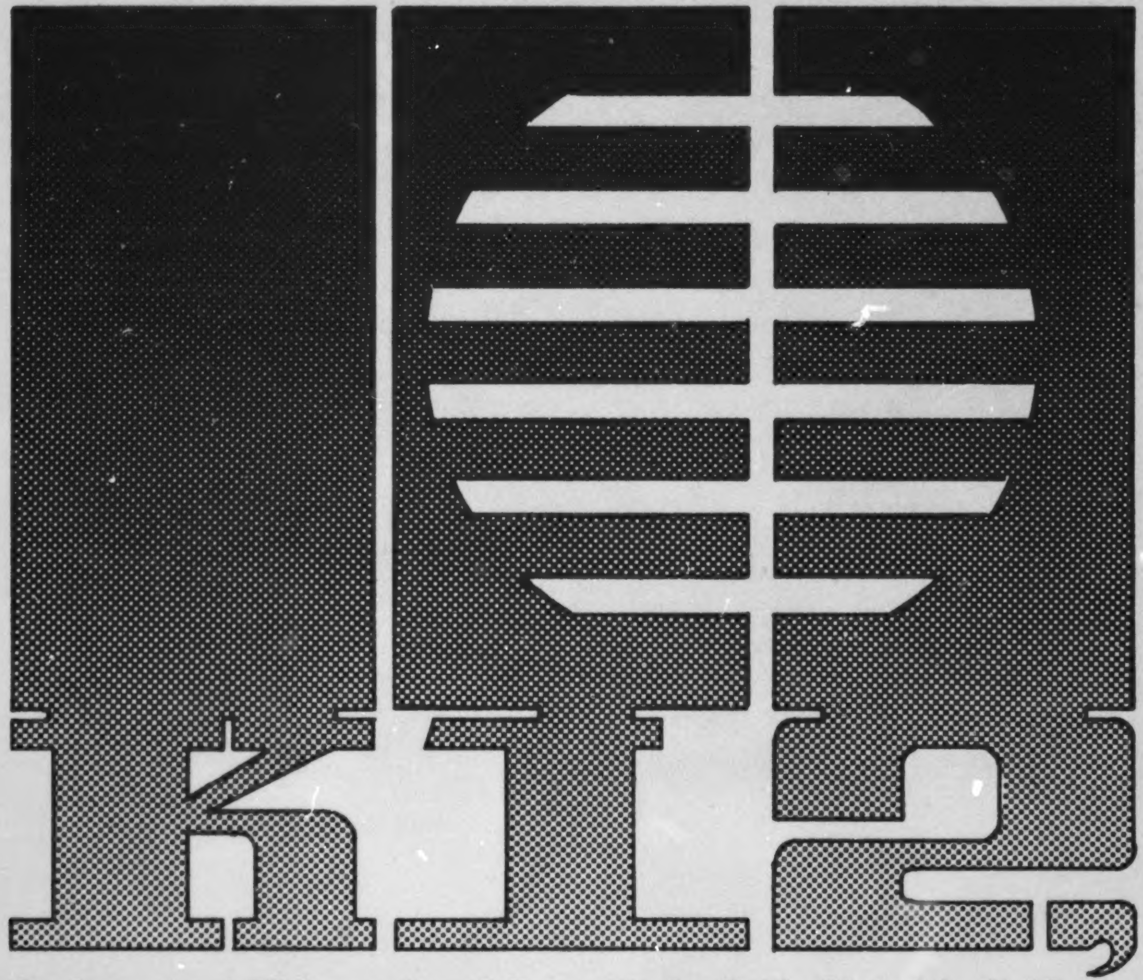
DOE/IR/8685-01 Vol. 2

August 1979

Volume 2
Energy Education Materials Inventory



An Annotated Bibliography of Currently Available Materials, K-12

Prepared by:
Energy Institute
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Contract No. EC-77-C-01-8685

Prepared for:
U.S. Department of Energy
Assistant Secretary for
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Office of Education, Business and Labor Affairs
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SE 029 505

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Energy Education Materials Inventory, Volume II

Introduction

Purpose of the Energy Education Materials Inventory. The two volumes of the Energy Education Materials Inventory (EEMI) comprise an annotated bibliography of widely available energy education materials and reference sources. This systematic listing is designed to provide a source book which will facilitate access to these educational resources and hasten the inclusion of energy-focused learning experiences in kindergarten through grade twelve.

History of the EEMI Project. In 1977, the Energy Institute (now the Energy Laboratory) of the University of Houston Central Campus undertook the task of verifying for the U. S. Department of Energy the availability of approximately 4,000 items which appeared in an inventory derived from computer data bases which was compiled for the Federal Energy Administration in 1976. Volume I of the EEMI was the result of that endeavor. It contains titles and descriptive information on materials listed in the original inventory which were found to be still available as of May 1, 1978. Volume I may be purchased for $5.25 from the U. S. Government Printing Office, Washington, D. C. 20402.* A second phase of the project was conducted for the purpose of expanding and updating Volume I. EEMI Volume II contains the results of a broad search for items not discovered through the original inventory process and for items which have become available since its completion in May, 1976.

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*Ask for Stock No. 061-000-00183-2.

Organization of the Inventory. The inventory consists of three major parts, color coded for easy use. A core section entitled Media (blue pages) contains titles and descriptive information on educational materials, categorized according to medium (film, printed material, etc.). The other two major sections - Grade Level (yellow pages) and Subject (pink pages) - are cross indexes of the items for which citations appear in the Media Section. These contain titles categorized according to grade level and subject and show the page numbers of the full citations. Each of the three sections is subdivided as shown in the Table of Contents. Within each subsection, the entries are listed alphabetically by title.

Additionally, Volume II extends the scope of Volume I in two ways. First, teacher or adult level materials have been included in Background Reading Material (under Media Section C.1 - Printed Materials). Such materials should benefit teachers wishing to broaden their own energy perspectives and can provide information for the development of classroom units on a wide range of specific energy issues. Second, the last section of Volume II (green pages) lists organizations which have contributed to the inventory. This section is organized to correspond to the major divisions of the Media Section.

Description of a Citation. The citations in the Media Section contain the information normally used by libraries to purchase or rent materials, plus a short annotation derived in most cases from information furnished by the producer or distributor. A typical entry includes the title and date of publication or production; the name of the author or producer, if known; the name and address of the distributor of the material; the cost, if known; the grade levels for which the material is suitable; an annotation describing the material which may include such information as subject area, emphasis, length (for films), suggested classroom applications, and descriptions of any accompanying material.

Use of the Inventory. A teacher may choose which section of the inventory to use according to his or her needs. For example, if a teacher is interested in locating a basic film on solar energy to be used in a 10th grade class, he/she may turn to the Grade Level index, subsection "Secondary", category "16mm Films", and scan the list of titles for films which seem appropriate. The teacher may then refer to the pages cited next to these titles and read the full annotations for further information. An appropriate film may also be located by beginning the search in the Subject index, subsection "Alternative Energy Sources", category "16mm Films". The procedure to follow is then the same as above. The choice of approach depends on the emphasis of the teacher's search. For instance, if he/she wants to present material on solar energy but has not decided on the appropriate medium, it would be best to begin in the Subject index. If, however, the teacher is specifically trying to locate a film, he/she should go directly to the Media section, under the category of films.

Ordering Material. Since prices and availability of items in the Inventory are subject to change, it would be wise for the potential user/purchaser to write to the address given to verify all information before ordering. Also, it may be noted that the subsection entitled "Energy Information Sources" which appears in the Media section contains the names and addresses of sources of material, rather than titles and descriptions of specific items. This section has been included in order to furnish a list of organizations whose value as educational materials resources may not be totally reflected by entries elsewhere in the Inventory. These include: 1) groups which are continually producing such a large volume of energy-related literature (brochures, pamphlets, etc.) that it was impractical to include each title in the body of the Inventory; 2) organizations which produce educational materials and may be valuable resources for teachers, but which serve limited geographic areas or populations and therefore are outside the actual scope of this inventory, with its focus on material available nationwide (for example, state offices of energy and/or education); 3) firms and organizations which have material available for distribution but requested that they be contacted directly for specific information; and 4) groups which offer a range of services and information which cannot be easily described in brief annotative form. In the case of state offices of energy and education, only those states responding to inquiries regarding availability of material have been included. States not included on the list may have similar resources. Some organizations have not been included simply because information was not received in time to be included for publication.

> For information about currently available energy education materials published by the Department of Energy write to the U. S. Department of Energy, Technical Information Center, P. O. Box 62, Oak Ridge, Tennessee 37830. For a listing of films available on free loan, ask for the Energy Films Catalog; for a listing of free booklets and curriculum materials, ask for the Selected Department of Energy Publications.

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I. MEDIA

A. Audiovisual

1. Audiocassettes and Records

ASK THE EXPERTS 1977, 1978

American Nuclear Society; 555 North Kensington Avenue;
LaGrange Park, IL 60525
Price: $20.00 (each record) Level: 10-12

These 2 records, which can be purchased separately, offer the opinions of experts who support nuclear development. The 1977 version introduces the basic concepts of nuclear power, while the 1978 record concentrates on the need to develop new energy sources, especially nuclear.

CRC FORUM ON ENERGY (1977)

CRC Press, Incorporated; 2255 Palm Beach Lakes Boulevard;
West Palm Beach, FL 33409
Price: $87.50 (each session) Level: 10-12

There are 4 sessions in the CRC Forum on Energy, each presenting the viewpoints of recognized energy experts on specific problems relevant to the current energy dilemma. Session I deals with the amount of energy that will be required through the year 2000; Session II outlines the advantages and problems associated with both coal and atomic generation of electricity; Session III offers an overview of the potential of solar power; Session IV looks at U. S. energy problems within the context of international political and economic realities.

ENERGY: A DIALOGUE

American Association for the Advancement of Science,
Special Audiotape Program, Department Q;
1515 Massachusetts Avenue, N. W.; Washington, D. C. 20005
Price: $35.00 Level: 10-12

The energy problems we now face are treated in depth in this 6-cassette audiotape album. The series was created from interviews with people who know about the energy problem and focuses on 3 major themes: the energy crisis--what it is and how it occurred; technological options; and the interrelationships of energy with lifestyles, environment, population, resources, trade policy, politics, and the family budget.

1. Audiocassettes and Records

ENERGY AND THE ATOM 1975, 1976

American Nuclear Society; 555 North Kensington Avenue;
LaGrange Park, IL 60525
Price: $45.00 (each album) Level: 10-12

Each album in this 2-part set contains 3 long-playing records with twelve 10-minute informal interviews with experts in various alternative energy fields, particularly nuclear energy. The 1975 album is devoted entirely to nuclear energy issues.

ENERGY OPTIONS

World Future Society; P. O. Box 30369;
Washington, D. C. 20014
Price: $7.00 Level: 10-12

This cassette explores the history of energy use, the role of coal in meeting our energy needs, and the potential for utilization of ocean thermals and wind energy sources. Four interviews covering these topics are included on this 90-minute presentation.

THE FUTURE OF FUSION POWER

Author: William Gough
World Future Society; P. O. Box 30369;
Washington, D.C. 20014
Price: $6.00 Level: 10-12

Nuclear energy is one alternative to fossil fuels. This tape discusses the nature of atomic fusion and research being done to develop this limitless source of power.

THE FUTURE OF OCEAN THERMAL ENERGY

Author: Robert Cohen
World Future Society; P. O. Box 30369;
Washington, D. C. 20014
Price: $6.00 Level: 10-12

It may one day be possible to use the ocean as a direct source of power. This cassette reports on research into the use of ocean temperature differentials for the generation of electricity.

1. Audiocassettes and Records

FUTURE PROBLEMS IN THE USE OF COAL

Author: William Gouse
World Future Society; P. O. Box 30369;
Washington, D. C. 20014
Price: $6.00 Level: 10-12

This tape focuses on the potential for coal to become a primary energy source. It notes the large reserves in this country and discusses some of the energy forms that are available from coal.

FUTURE STUDIES PERSPECTIVE (1977)

Author: Deane Thompson
National Education Association, Academic Building;
Saw Mill Road; West Haven, CT 06516
Price: $18.00 Level: 10-12

This series of 6 cassettes, which grew out of the classroom experiences of the author, Deane Thompson, deals with issues resulting from overmechanization, exhaustion of energy sources, and the resultant symptoms of future shock in contemporary society. A detailed instructor's guide is included, along with a taped interview with the author.

TAPPING THE WIND

Author: Lewis Divone
World Future Society; P. O. Box 30369;
Washington, D. C. 20014
Price: $6.00 Level: 10-12

This tape examines some of the problems and advantages of using wind as an energy source. It discusses the nature of wind, its availability, and the technology needed to harness this abundant power source.

2. 16mm Films and Videocassettes

ABU DHABI (1970)

American Petroleum Institute; 2101 L Street, N. W.;
Washington, D. C. 20037
Price: free loan Level: 10-12

This 22-minute color film traces the history of Abu Dhabi, a country which has been transformed from one of the world's poorest to one of the richest due to its vast oil reserves. The film concentrates on the economic and social changes brought about by oil revenue.

THE ADVOCATES (1977)

The Public Television Library (PBS); 475 L'Enfant Plaza, S.W.;
Washington, D. C. 20024
Price: Rental (2-week) - $95.00 Level: 10-12
Purchase - $200.00

"Should Congress Pass Carter's Energy Program?" is the question debated by proponent U. S. Congressman Morris Udall (D-AZ), and opponent U. S. Congressman Robert Krueger (D-TX). The moderator of this 59-minute videocassette is Hedrick Smith, the Washington Bureau Chief for the New York Times.

THE ADVOCATES (1977)

The Public Television Library (PBS); 475 L'Enfant Plaza, S.W.;
Washington, D. C. 20024
Price: Rental (2-week) - $95.00 Level: 10-12
Purchase - $200.00

Proponent Charles Walker, former Deputy Secretary of the Treasury, and his opponent, Anthony Roisman, staff attorney for the Natural Resources Defense Council, debate the question, "Should the United States Expand its Nuclear Power Program?" Moderator of this 60-minute videocassette program is Michael Dukakis, Governor of Massachusetts.

2. 16mm Films and Videocassettes

ALASKA--THE GREAT LAND

American Petroleum Institute; 2101 L Street, N. W.;
Washington, D. C. 20037
Price: free loan Level: 10-12

This color film examines Alaska as it is today and follows its history, from Bering's discovery in 1741 to the 1957 discovery of oil close to the Arctic shore--oil in a quantity which has already begun to influence Alaska's future. Running time is 28 minutes.

ALASKA'S NORTH SLOPE--VISION FOR TOMORROW (1977)

Modern Talking Picture Service; 2323 New Hyde Park Road;
New Hyde Park, NY 11040
Price: free loan Level: 10-12

This 28-minute color film documents the discovery and eventual production of oil from the North Slope. Closing sequences show the first tanker transporting oil to West Coast refineries.

ALYESKA: THE TRANS-ALASKA PIPELINE

Atlantic Richfield Company, Films and Publications Services;
P. O. Box 2679 - T. A.; Los Angeles, CA 90051
Price: free loan Level: 7-12

This 28-minute film personalizes the Alaskan pipeline construction project by giving a picture of the men and women who worked on the project. It presents enough of the "nuts and bolts" to inform the viewer of what was involved in building the pipeline.

AS IF PEOPLE MATTERED--E. F. SCHUMACHER

Bitterroot Films; Hammond Arcade; Missoula, MT 59801
Price: Purchase - $200.00 Level: 10-12

This color documentary introduces Dr. E. F. Schumacher's ideas about the value of appropriate technology and local self-sufficiency. Through use of visual metaphor, the 15-minute film discusses the basic dilemmas that confront modern society and industry and suggests possible solutions.

2. 16mm Films and Videocassettes

THE ATOM

Almanac Films, Incorporated; 915 Broadway;
New York, NY 10010
Price: Contact source for price information. Level: 7-12

Animation and photos in this 12-minute film explain the structure of the atom and the production of atomic energy. The explosion of the first atomic bomb is documented, and peaceful uses of atomic energy are illustrated.

ATOM SMASHING (1948)

Universal Education and Visual Arts; 100 Universal City Plaza;
Universal City, CA 91608
Price: Contact source for price information. Level: 7-12

This 22-minute film discusses the work of the Curies and James Chadwick in discovering the neutron and explains the splitting of the lithium atom. Albert Einstein appears in the film and explains his theory of mass and energy.

THE ATOMIC SEARCH

Society of Mining Engineers of the American Institute of
Mining and Metallurgical Engineers; 540 Arapeen Drive,
P. O. Box 8800; Salt Lake City, UT 84108
Price: Contact source for price information. Level: 9-12

This film is concerned with the continuing research into peaceful uses of nuclear energy in geology, medicine, construction, etc. Running time is 29 minutes.

2. 16mm Films and Videocassettes

BETTER ACTIVE TODAY THAN RADIOACTIVE TOMORROW

Green Mountain Post Films; Box 177; Montague, MA 03151
Price: Contact source for price information. Level: 10-12

This 65-minute black and white film tells the story of why citizens occupied a large tract of land in West Germany that had been designated as the site for a large nuclear power complex for the generation of electricity. The film concentrates on the deeper human and political motivations of the people involved in the protest.

THE BIG JOB (1977)

Modern Talking Picture Service; 2323 New Hyde Park Road; New Hyde Park, NY 11040
Price: free loan Level: 10-12

Looking for a career, a young man spends a summer aboard an oil exploration vessel and learns the enormity of the task of finding new oil. This 34-minute color film shows that an oil company is made up of many people working in unison to get the job done.

BILL LOOSELY'S HEAT PUMP

Bullfrog Films, Incorporated; Oley, PA 19547
Price: Rental - $15.00 Level: 7-12
Purchase - $140.00 (16mm film)

This 10-minute color film describes how Bill Loosely, a Burlington, Ontario, resident, has been heating his home since 1951 by tapping underground heat outdoors and pumping it inside. The heat-pump system he uses is simple and suitable for many homes as an alternative source of heat.

2. 16mm Films and Videocassettes

BILLION BARREL BONANZA (1978)

Modern Talking Picture Service; 2323 New Hyde Park Road;
New Hyde Park, NY 11040
Price: free loan Level: 10-12

Filmed on location over a 5-year period, this 27-minute color presentation details all phases of oil production in the North Sea. Drilling in the North Sea is one of today's most challenging ventures in the search for energy resources.

BORN IN FREEDOM

Modern Talking Picture Service; 2323 New Hyde Park Road;
New Hyde Park, NY 11040
Price: free loan Level: 10-12

This is a 26-minute color documentary which details the history of the first oil well. Vincent Price portrays drilling pioneer Edwin L. Drake.

THE BREEDER (1978)

Stuart Finley, Incorporated; 3428 Mansfield Road;
Falls Church, VA 22041
Price: Rental - $35.00 Level: 10-12
Purchase - $350.00

This film looks at the science of nuclear energy with special emphasis on the technology of the controversial breeder reactor. In addition to providing a comprehensive introduction to the principles of nuclear fission, the 23-minute color film explains how conventional nuclear power plants create electrical energy.

2. 16mm Films and Videocassettes

BRIDGE TO TOMORROW (1977)

Screenscope, Incorporated; 1022 Wilson Boulevard;
Rosslyn, VA 22209
Price: Purchase - $325.00 Level 7-12

This 27-minute color film traces the history of the relationship between civilization and energy, beginning with the discovery of fire and continuing through the use of coal, oil, and finally nuclear energy. The theme of the film is that progress cannot continue without nuclear energy.

BRIDGING THE ENERGY GAP (1978)

Continental Oil Company, Public Relations Department;
P. O. Box 2197; Houston, TX 77001
Price: free loan Level: 7-12

Bridging the Energy Gap is a 23-minute film which depicts how oil industry science and technology are being used to develop other types of energy. It can serve as an energy update for science classes and will be of interest to any student thinking about a career in the energy industry.

CLEAN ENERGY

Association Films; 866 Third Avenue; New York, NY 10022
Price: free loan Level: 10-12

This 25-minute color film, produced by the National Aeronautics and Space Administration, examines the energy conversion technologies that will be necessary if society chooses to minimize future use of nuclear energy. It concentrates on work being done at the NASA Lewis Research Center in Cleveland, Ohio.

CLEAN ENERGY FOR TODAY AND TOMORROW (1975)

American Petroleum Institute; 2101 L Street, N. W.;
Washington, D. C. 20037
Price: free loan Level: 10-12

The economics of production and new technology are covered in this color film on natural gas, narrated by Hugh Downs. Running time is 27 minutes.

2. 16mm Films and Videocassettes

COAL--THE ROCK THAT BURNS

Centron Films; 1619 W. 9th Street; Lawrence, KS 66044
Price: $205.00 Level: 4-8

This film illustrates how several types of coal were originally formed and shows the distribution of coal on various continents. It contrasts early coal mining with today's innovations in the coal industry, deals with ecological considerations, and describes some surprising by-products of coal.

CONSERVATION: INVESTING IN TOMORROW (1977)

Department of Energy Film Library, Technical Information
Center (TIC); P. O. Box 62; Oak Ridge, TN 37830
Price: free loan Level: 7-12

This 7-minute film describes some of the ways we can save energy now. Such ideas include more efficient machines and industrial processes, improvements in transmission of electric power, new autos, and making homes and buildings energy efficient.

CYCLES--RENEWALS FOR MINERALS AND FUELS

Association Films; 866 Third Avenue; New York, NY 10022
Price: free loan Level: 7-12

This 14-minute color film serves to remind us that there is no quick cycle of natural renewal for minerals and fuels. It shows how a city and private industry have cooperated to turn garbage into electricity and raw materials, thus conserving valuable fossil fuel resources.

DANGER! RADIOACTIVE WASTE (1977)

Films, Incorporated; 733 Green Bay Road; Wilmette, IL 60091
Price: Rental - $40.00 Level: 7-12
Purchase - $575.00 (16mm film)
$400.00 (videocassette)

It has become obvious that one of the major problems associated with the use of nuclear energy is that of waste disposal. This 50-minute color film explains the dangers of radioactive wastes and the inability of government and industry to solve this inherent problem of breeder reactors.

2. 16mm Films and Videocassettes

DATELINE--STINGRAY

American Petroleum Institute; 2101 L Street, N. W.;
Washington, D. C. 20037
Price: free loan Level: 9-12

In this 40-minute color film, a reporter tells the story of the challenge faced by the gas industry to find offshore deposits of natural gas to meet industrial and consumer demands. The total picture of offshore energy development is shown, from exploration to production and transmission of new gas supplies for consumers all across the U. S.

DAWN OF THE SOLAR AGE: Part 1, SOLAR ENERGY; Part 2, WIND AND WATER ENERGY (1976)

Time-Life Multimedia; Time and Life Building;
New York, NY 10028
Price: Rental - $60.00 (both titles) Level: 10-12
Purchase - $650.00 (both titles)
$325.00 (both titles, videocassette)
$375.00 (individual titles)
$190.00 (individual titles, videocassette)

These films examine solar, wind, and water energy alternatives to our current energy sources. They also look at the problems involved in making such alternatives economical and efficient.

THE DAYS OF EMPIRE ABO--HOW AN OIL FIELD CAME TO BE (1975)

Modern Talking Picture Service; 2323 New Hyde Park Road;
New Hyde Park, NY 11040
Price: free loan Level: 7-12

This is the story of the discovery and production of oil from a field in southeastern New Mexico. Modern oil recovery technology is highlighted in this 22-minute color film.

2. 16mm Films and Videocassettes

DESERT CLOUD (1976)

Bullfrog Films Incorporated; Oley, PA 19547
Price: Rental - $28.50 Level: 7-12
Purchase - $250.00

This film is about a solar-powered air structure called Desert Cloud which self-inflates and rises from the desert floor in Kuwait. The beauty and power of solar energy is shown, and the heritage of desert architecture is discussed.

DOWN TO EARTH: CITY LIVING (1977)

Pyramid Films; Box 1048; Santa Monica, CA 90406
Price: Rental - $30.00 Level: 10-12
Purchase - $250.00 (16mm film)
$190.00 (videocassette)

This film depicts methods for transforming an urban dwelling into an almost self-sufficient habitat. It includes methods for utilization of solar energy and for recycling water and organic waste.

EKOFISK--A CITY AT SEA

Modern Talking Picture Service; 2323 New Hyde Park Road; New Hyde Park, NY 11040
Price: free loan Level: 7-12

In this 20-minute color film, viewers will see how oil was discovered in the North Sea. A virtual "city at sea" was created so the oil could be recovered from this hostile environment.

2. 16mm Films and Videocassettes

AN ELECTRIC TALKING PICTURE (1975)

Consolidated Edison Company of New York, Incorporated;
4 Irving Place; New York, NY 10003
Price: Purchase - $250.00 Level: 7-12
(Note: purchase inquiries should be sent
to: Kim and Gifford; 342 Madison Avenue;
New York, NY 10021)

This 13-minute animated film, narrated by Bob and Ray, looks at how electricity is made, what fuels are used in its production, and what is happening to electricity demand and fuel supply. Emphasis is placed on conservation, with a brief look at nuclear power and the fission process.

ELECTRICITY--PRODUCTION (1964)

Indiana University, Audio-Visual Center;
Bloomington, IN 47401
Price: Contact source for price information. Level: 7-12

This 14-minute sound film develops the concept of energy conservation in explaining the basic principles of the generator, storage cell, and primary cell. It shows applications of thermocouples and of solar, fuel, and photocells.

ELECTRICITY--THE WAY IT WORKS (1975)

Screen News Digest; 235 East 45th Street;
New York, NY 10017
Price: Purchase - $275.00 Level: 4-12

This 16-minute color film clearly explains how electricity is produced and transmitted. It also focuses on America's future needs and sources of electricity.

2. 16mm Films and Videocassettes

ENERGY (A Series, 1973)

Churchill Films; 662 North Robertson Boulevard;
Los Angeles, CA 90069
Price: Purchase price for each film is given below. Contact Churchill Films for rental information.
Level: 7-12

This is a series of 4 films dealing with related energy issues. Individual films are:

ENERGY: THE DILEMMA

Price: Purchase - $290.00

This 20-minute color film explores energy growth patterns, problems of supply and demand, depletion of fossil fuels, and energy-based economic and social problems, with an overall emphasis on the need to conserve. A teacher's guide with activities is included.

ENERGY: THE NUCLEAR ALTERNATIVE

Price: Purchase - $290.00

This 20-minute color film explains what fission power is, how it works, and explores the problems of nuclear plant safety and radioactive wastes. A teacher's guide accompanies the film.

ENERGY: NEW SOURCES

Price: Purchase - $290.00

Many alternative energy technologies are possible, including solar, fusion, and geothermal. This 20-minute color film, with teacher's guide, makes the point that we should continue to develop new energy options, rather than rely on traditional sources of power.

2. 16mm Films and Videocassettes

ENERGY (A Series, 1973), Continued

ENERGY: LESS IS MORE

Price: Purchase - $270.00

This 18-minute color film investigates the need for slowing the growth of energy consumption and suggests ways in which this can be done. A teacher's guide with suggested activities accompanies the film.

ENERGY (1973)

McGraw-Hill Films; 110 15th Street; Del Mar, CA 92014
Price: Rental - $31.00 Level: 10-12
Purchase - $305.00 (16mm film)
$230.00 (videocassette)

In this 27-minute color film, Linus Pauling of Stanford, George Wald of Harvard, and Philip Morrison of Massachusetts Institute of Technology discuss the elusive concept of energy. The discussion centers on entropy, atomic energy, and new sources of energy that could replace those which deplete natural resources.

ENERGY

Paramount Communications; 5451 Marathon Street;
Hollywood, CA 90038
Price: Rental - $20.00 Level: 1-6
Purchase - $175.00

This 10-minute color film illustrates the degree to which our modern lifestyle is dependent on energy from natural resources and explores the spectrum of energy sources from human and animal energy to nuclear power. Practical uses of energy introduce the theme of conservation, and plans for expanded development of nuclear, geothermal, and solar energy are discussed.

2. 16mm Films and Videocassettes

ENERGY (1965)

Universal Education and Visual Arts; 100 Universal City Plaza;
Universal City, CA 91608
Price: Contact source for price information. Level: 10-12

This 11-minute film shows how man as an energy machine is inefficient. Three sources of energy are described: water, coal, and oil; how they have given man more leisure time is explained.

ENERGY--A FAMILY ALBUM (1977)

Department of Energy Film Library, Technical Information
Center (TIC); P. O. Box 62; Oak Ridge, TN 37830
Price: free loan Level: 7-12

This 9-minute film gives a brief history of energy in America. It details part of the nation's plan to keep ahead of energy demands with alternative sources of power.

ENERGY: A NATIONAL ISSUE

Aims Instructional Media, Incorporated; 626 Justin Avenue;
Glendale, CA 91201
Price: Rental (3-day) - $50.00 Level: 4-12
Purchase - $385.00

The urgent need for more efficient energy usage in the face of a rapidly diminishing energy supply is made clear in this film which features the familiar cartoon characters, the Flintstones. The film is in color, runs 27 minutes, and is narrated by Charlton Heston.

ENERGY AND ALL THAT (1973)

Michigan State University, Instructional Media Center;
East Lansing, MI 48824
Price: Rental (3-day) - $5.00 Level: 7-12

This 30-minute color film deals with the problem of today's energy crisis. Laymen and oil company executives comment on the search for new sources of energy and discuss ways to educate the public in the wise use of energy.

2. 16mm Films and Videocassettes

ENERGY AND MORALITY (1979)

Bitterroot Films; Hammond Arcade; Missoula, MT 59801
Price: Rental - $45.00 Level: 7-12
Purchase - $400.00

Energy and Morality, a 40-minute color/sound film, looks at the relationship between our increasing use of energy and our changing ethical and moral values. The film combines visual metaphors, dramatics, animation, and the statements of E. F. Schumacher, Amory Lovins, and Howard T. Odum.

ENERGY AND NUCLEAR POWER (1977)

Xerox Films; 245 Long Hill Road; Middletown, CT 06457
Price: Rental - $16.00 Level: 7-12
Purchase - $250.00 (16mm)
$165.00 (videocassette)

The story of the energy crisis is told in this 14-minute color film--what it is, how it developed, and what lies ahead. The film includes a look at the benefits and hazards of harnessing nuclear power for peaceful use.

ENERGY AWARENESS TELEVISION FILM CLIPS (1976, 1977)

American Nuclear Society; 555 North Kensington Avenue;
LaGrange Park, IL 60525
Price: Purchase - $45.00 Level: 10-12
(each package)

These collections of short, 16mm color film clips, each complete with script, offer 60-second and 30-second spots designed to convince the audience of the need to develop and utilize all energy sources, especially nuclear. The seriousness of the current energy squeeze is the basic theme.

THE ENERGY BRIDGE

Association Films; 866 Third Avenue; New York, NY 10022
Price: free loan Level: 7-12

This 21-minute color film documents strip mining of coal. It stresses land reclamation after surface mining has concluded.

2. 16mm Films and Videocassettes

ENERGY CAROL

National Film Board of Canada; 16th Floor,
1251 Avenue of the Americas, New York, NY 10020
Price: Rental - $20.00 Level: 4-12
Purchase - $160.00

Energy Carol is a 10-minute animated color film about Ebenezer Scrooge, president of Zeus Energy Company, whose motto is, "To waste is to grow". It is a humorous look at the profligate way we live and what the future may hold.

ENERGY CONSERVATION

WNET/13 Media Services; 356 West 58th Street;
New York, NY 10019
Price: Purchase - $245.00 Level: 10-12
(videocassette or videotape)

This is program #1169 of the "MacNeil/Lehrer Report" public television series. Several top experts share viewpoints on needs and methods for saving energy.

ENERGY CONSERVATION IN RESIDENTIAL CONSTRUCTION (1977)

Center for Energy Policy and Research; New York Institute
of Technology; Old Westbury, NY 11568
Price: Contact source for Level: 10-12
price information.

This 25-minute videocassette outlines the design and construction features of a special home built by the Research Foundation of the National Association of Home Builders. This home was designed to consume less than half the energy of a conventional home at an increase in construction cost of approximately 10%.

2. 16mm Films and Videocassettes

THE ENERGY CRISIS: A SERIES (1973)

Films, Incorporated; 733 Green Bay Road; Wilmette, IL 60091
Level: 7-12

This is a series of 7 films which deal with various aspects of the energy problem. Individual titles are:

COAL

Price: Rental - $30.00
Purchase - $355.00 (16mm)
$250.00 (videocassette)

Coal is again becoming king, now that other power sources are in short supply; this 27-minute color film addresses the dilemma presented by strip mining, the most economical way of mining coal in many areas. Public policy in strip mining areas must strike a balance between environmental considerations and energy needs.

ENVIRONMENT

Price: Rental - $20.00
Purchase - $180.00 (16mm film)
$130.00 (videocassette)

This film illustrates the conflict between environmentalists and the oil companies, with the Alaskan pipeline a central case in point. Running time of the film is 11 minutes.

FUTURE FUELS

Price: Rental - $20.00
Purchase - $240.00 (16mm film)
$195.00 (videocassette)

This 17-minute color film looks at research into new energy sources: shale oil, tidal power, underground steam, nuclear power, solar energy. None of these is commercially practical yet, but the need for energy continues to intensify the search.

2. 16mm Films and Videocassettes

THE ENERGY CRISIS: A SERIES (1973), Continued

NATURAL GAS

Price: Rental - $20.00
Purchase - $240.00 (16mm film)
$195.00 (videocassette)

According to this 17-minute color film, the natural gas crisis stems from one fact: gas is being consumed twice as fast as it is being discovered. Policy, price, and distribution issues are only symptoms of this basic problem.

OIL IN THE MIDDLE EAST

Price: Rental - $20.00
Purchase - $275.00 (16mm film)
$220.00 (videocassette)

This 20-minute color film examines the ways in which the U. S. can reconcile 3 elements of national policy: a commitment to Israel, an economic interest in Arab oil, and a strategic interest in avoiding conflict with Russia in the Middle East. The film also looks at the effects of the oil economy of Middle East nations as they find themselves in a new position of power.

OIL IN THE UNITED STATES

Price: Rental - $38.00
Purchase - $445.00 (16mm film)
$315.00 (videocassette)

The problems of oil production and distribution are probed in this 37-minute color film. Conflicting concerns of environmentalists, involving potential damage done by refineries and use of deep water ports, and independent oil dealers forced to go out of business because of lack of supply, make the questions and choices complex.

THE ENERGY CRISIS: A SERIES (1973), Continued

POWER

Price: Rental - $20.00
Purchase - $260.00 (16mm film)
$210.00 (videocassette)

This 19-minute color film discusses the dilemma of America's increasing electricity consumption: power companies are under pressure from consumers and environmentalists, nuclear power still presents risks, coal mining often conflicts with environmental standards, and oil is becoming more scarce and expensive. Constraints such as these combine to limit our options in ensuring a reliable supply of electricity for the future.

THE ENERGY CRISIS: THE END OF THE BEGINNING? (1974)

The Public Television Library (PBS); 475 L'Enfant Plaza, S.W.; Washington, D. C. 20024
Price: Rental - $95.00 (2-week) Level: 10-12
Purchase - $200.00

This 59-minute videocassette provides an examination of conflicting statements on the energy crisis. The program also examines the nation's fastest growing community--Nashua, New Hampshire--and the effect the energy crisis has had upon it.

ENERGY: CRITICAL CHOICES AHEAD (1975)

U. S. Department of Commerce, Office of Energy Policy and Programs, Room 2203; Washington, D. C. 20230
Price: Purchase - $125.00 Level: 7-12

This 15-minute color production examines the U. S. energy supply situation today and in the near future. The film asserts the need for nuclear energy to increase energy supplies.

2. 16mm Films and Videocassettes

ENERGY DILEMMA (1973)

Michigan State University, Instructional Media Center;
East Lansing, MI 48824
Price: Rental - $7.50 (3-day) Level: 10-12

The energy crisis in North America is purely a matter of people increasing in number and demanding ever higher quantities of services and goods. Since it has been predicted that in less than a decade we will need twice the energy we are using now, this 18-minute film suggests that the solution, like the problem, rests with the people--we will have to limit our energy appetite.

THE ENERGY GAME

WNET/13 Media Services; 356 West 58th Street;
New York, NY 10019
Price: Rental - $60.00 (1-day) Level: 7-12
Purchase - $550.00 (16mm film)
$385.00 (videocassette or videotape)

The energy crisis we've been hearing about for so long has finally come to pass. The Energy Game, a 58-minute color presentation, provides us with a look at some of the factors that forced us into an energy crisis and some of the solutions.

ENERGY: HARNESSING THE SUN

Sterling Educational Films; 241 East 34th Street;
New York, NY 10016
Price: Purchase - $255.00 Level: 7-12

The environmental and economic problems of our fossil fuels and the concerns about the safety of nuclear reactors are used as a frame of reference for the introduction of solar energy. Animated graphics are used in this 20-minute color film to explain the various forms of solar technology.

2. 16mm Films and Videocassettes

ENERGY IN PERSPECTIVE (1978)

Modern Talking Picture Service; 2323 New Hyde Park Road;
New Hyde Park, NY 11040
Price: free loan Level: 10-12

This 21-minute color film examines the limits of the world's supply of fossil fuels. It considers alternative sources of energy and emphasizes a need to turn away from the thoughtless overconsumption of the past.

ENERGY MANAGEMENT

Walter J. Klein Co., Ltd.; 6301 Carmel Road;
Charlotte, NC 28211
Price: free 24-hour loan Level: 7-12
Purchase - $275.00

This quarter-hour color film provides simple, easy-to-follow guidelines to personal management of energy. It is aimed at fostering everyday activities that add up to substantial savings in the home.

ENERGY MONSTERS: HOW TO STARVE THEM

BFA Educational Media; 2211 Michigan Avenue, P. O. Box 1795;
Santa Monica, CA 90406
Price: Purchase - $185.00 Level: 4-9

In making a solar oven, two children begin to think about all our energy needs and energy sources. The film shows how they begin a campaign to eliminate wasteful uses of energy in their home.

ENERGY SEARCH AND RESEARCH (1976)

Continental Oil Company, Public Relations Department;
P. O. Box 2197; Houston, TX 77001
Price: free loan Level: 7-12

This 20-minute film depicts 5 areas of Conoco's research and development. The film emphasizes the role technology must play in securing tomorrow's energy supplies.

2. 16mm Films and Videocassettes

ENERGY SOURCES: A NEW BEGINNING (A Series)

University of Colorado, Educational Media Center; Stadium 360;
Boulder, CO 80309

Price: Purchase - $2,600.00 (entire set) Level: 10-12
$100.00 (set of 8 audiocassette/filmstrip programs)
See below for price information on individual films.

This series includes nine 30-minute color and sound films, eight 10-minute audiocassette/filmstrip programs, and 10 study guides with project descriptions. Individual films, as listed below, may be purchased or rented separately; and a teaching guide for the entire series is available.

ENERGY SOURCES: A MATTER OF POLICY (1975)

Price: Rental - $10.00 (3-day)
Purchase - $333.00 (16mm film)

This overview of the current energy situation includes a look at lifestyle choices, energy and the environment, fuel sources, and technological advances. An accompanying study guide is available for $2.50.

GEOTHERMAL POWER--THE GREAT FURNACE (1975)

Price: Rental - $10.00 (3-day, 16mm film)
Purchase - $333.00 (16mm film)
$ 15.00 (audiocassette/filmstrip)

This film shows how geothermal power can be put to use and discusses financial support for geothermal power production. An accompanying study guide is available for $2.50.

ENERGY SOURCES: A NEW BEGINNING (A Series), Continued

NUCLEAR ENERGY--THE GREAT CONTROVERSY (1978)

Price: Rental - $10.00 (3-day)
Purchase - $333.00 (16mm film)
$ 15.00 (audiocassette/filmstrip)

This film shows the peaceful use of the atom, including various aspects of nuclear-generated power. A study guide is available for $2.50.

NUCLEAR GAS STIMULATION--TAPPING OUR NATIONAL HERITAGE (1975)

Price: Rental - $10.00 (3-day)
Purchase - $333.00 (16mm film)
$ 15.00 (audiocassette/filmstrip)

In this film, the uses of natural gas are shown along with the potential benefits and dangers that result from using nuclear fracturing to gain access to natural gas reserves. The study guide is available for $2.50.

OIL SHALE--THE ROCK THAT BURNS (1975)

Price: Rental - $10.00 (3-day)
Purchase - $333.00 (16mm film)
$15.00 (audiocassette/filmstrip)

This film discusses recovery of oil from oil shale and the economic and environmental problems involved. An accompanying study guide is available for $2.50.

2. 16mm Films and Videocassettes

ENERGY SOURCES: A NEW BEGINNING (A Series), Continued

THE SLEEPING GIANT--COAL (1975)

Price:	Rental - $10.00 (3-day)	
	Purchase -	$333.00 (16mm film)
		$15.00 (audiocassette/ filmstrip)

This film gives the history of coal, its accumulation, deposition, and utilization. A study guide is available for $2.50.

SOLAR POWER--THE GIVER OF LIFE (1975)

Price:	Rental - $10.00 (3-day)	
	Purchase -	$333.00 (16mm film)
		$ 15.00 (audiocassette/ filmstrip)

This film shows solar power as a possible solution to our decreasing energy supplies and discusses changes in lifestyle that may be necessary. A study guide is available for $2.50.

TAR SANDS--FUTURE FUEL (1975)

Price:	Rental - $10.00 (3-day)	
	Purchase -	$333.00 (16mm film)
		$ 15.00 (audiocassette/ filmstrip)

This film discusses the development of tar sands, a little-known energy resource, and the economic aspects of that development. A study guide is available for $2.50.

2. 16mm Films and Videocassettes

ENERGY SOURCES: A NEW BEGINNING (A Series), Continued

WIND POWER: THE GREAT REVIVAL (1975)

Price: Rental - $10.00 (3-day)
Purchase - $333.00 (16mm film)
$ 15.00 (audiocassette/filmstrip)

This film discusses the storage and use of wind energy, systems using combinations of solar and wind power, and the financial support needed to develop wind as an energy source. Accompanying study guide is available for $2.50.

ENERGY: THE FACTS . . . THE FEARS . . . THE FUTURE

BFA Educational Media; 2211 Michigan Avenue, P. O. Box 1795;
Santa Monica, CA 90406
Price: Purchase - $650.00 Level: 10-12

This film features Walter Cronkite and a team of newsmen who visit locations all over the U. S. to report on the severity of the energy problem and what is being done to cope with it. The conclusion is that the energy crisis is real and that we need a flexible strategy involving alternative energy sources to solve the problem--starting now.

ENERGY: THE FUELS AND MAN

National Geographic Society, Educational Services;
Department 78; Washington, D. C. 20036
Price: Purchase - $310.00 Level: 7-12
(16mm film and videocassette)

This 23-minute film traces the history of man's production of energy and notes the effects that changes in the use of various fuel sources have had on industry and society. The film distinguishes between renewable and nonrenewable fuels, surveys the major energy resources of today, and assesses their strengths and weaknesses.

2. 16mm Films and Videocassettes

ENERGY: THE PROBLEMS AND THE FUTURE (1978)

National Geographic Society, Educational Services;
Department 78; Washington, D. C. 20036
Price: Purchase - $310.00 Level: 7-12

This 23-minute color film looks to the future, examining 4 basic elements--water, earth, wind, and the fire of the sun--as possible energy sources. A teacher's guide is included.

ENERGY: THE ULTIMATE PROBLEM? (1976)

Coronet Films; 65 East South Water Street; Chicago, IL 60601
Price: Purchase - $155.00 Level: 7-12

In this 10-minute film, experts discuss the serious and complex problems that we face in dealing with the energy shortage. A physical chemist, nuclear plant superintendent, utility manager, solar researcher, environmentalist, and social scientist express different points of view.

ENERGY: WHAT ABOUT TOMORROW? (1977)

Barr Films; P. O. Box 5667, 3490 East Foothill Blvd.;
Pasadena, CA 91107
Price: Rental - $30.00 Level: 7-12
Purchase - $295.00

Energy shortages and rising costs have stimulated an intensive search for alternate energy sources. This 20-minute film explores the possibilities of various alternatives, including solar and geothermal power, and makes the point that no one source will be sufficient in meeting future energy needs.

EXPLORING SPACE: THE SUN AND ITS ENERGY (1978)

Coronet Films; 65 East South Water Street; Chicago, IL 60601
Price: Purchase - $160.00 Level: 4-9

This 10-minute film uses simulation to show how an astronomer might work in a solar observatory in orbit. From Spacelab, she describes the physical characteristics of the sun, explains its importance and effects upon the earth, and examines how solar energy is used now and might be used in the future.

2. 16mm Films and Videocassettes

THE FACES OF ENERGY

Association Films; 866 Third Avenue; New York, NY 10022
Price: free loan Level: 7-12

Cameras go aloft and out to sea to chronicle man's search for energy in remote areas. This 28-minute color film focuses on the people who do the work: riggers, oilers, tanker captains, drillers, and scientists.

THE FOSSIL STORY

Shell Film Library; 1433 Sadlier Circle West Drive;
Indianapolis, IN 46239
Price: free loan Level: 10-12

This 19-minute color film explains the 3 basic fossil forms: actual bones, pertified remains of animals and plants, and impressions left in stone. There is particular emphasis on the significance of fossil study in the search for oil deposits.

A FUNNY THING HAPPENED ON THE WAY TO THE GAS STATION

Modern Talking Picture Service; 2323 New Hyde Park Road;
New Hyde Park, NY 11040
Price: free loan Level: 7-12

This 27-minute color film shows how a 13 year-old boy follows the production of gasoline from the oil well in Texas to the service station in New Jersey. Free discussion materials are available with the film.

FUSION--THE ENERGY OF PROMISE (1974)

The Public Television Library; 475 L'Enfant Plaza, S. W.;
Washington, D. C. 20024
Price: Rental - $95.00 (2-week) Level: 10-12
Purchase - $200.00

This 60-minute program documents research being done to make sea water-fueled fusion reactors a reality. The U. S., Britain, and the Soviet Union are all in the race to develop fusion power.

2. 16mm Films and Videocassettes

GEOTHERMAL--NATURE'S BOILER (1977)

Department of Energy Film Library, Technical Information
Center (TIC); P. O. Box 62; Oak Ridge, TN 37830
Price: free loan Level: 7-12

Natural heat energy stored in and under the earth's crust can be put to work supplying energy needs all across the country. This 7-minute film shows how a system using this geothermal energy works in San Francisco.

GEOTHERMAL POWER (1974)

AV-ED Films; 910 North Citrus Avenue; Hollywood, CA 90038
Price: Purchase - $220.00 (16mm film) Level: 7-12
$160.00 (videocassette)

This 14-minute color film documents the use of geothermal power in steam fields in New Zealand, Mexico, and California. It shows how energy in steam is converted into electrical power.

GREAT WESTCHESTER GARBAGE CRISIS (1978)

Films, Incorporated; 733 Green Bay Road; Wilmette, IL 60091
Price: Rental - $35.00 Level: 10-12
Purchase - $320.00 (16mm film)
$225.00 (videocassette)

This 22-minute color film surveys the problems and possible solutions to solid waste disposal. One answer presented is resource recovery: converting refuse to oil, methane gas, or other fuels.

THE HEART OF THE MATTER (1975)

National Science Foundation; 1800 G Street, N. W.;
Washington, D. C. 20550
Price: Contact source for price information. Level: 4-12

This film explains the techniques scientists and engineers use at the Fermi National Accelerator Laboratory in Batavia, Illinois to probe the internal structure of the atom. Running time is 6 minutes.

2. 16mm Films and Videocassettes

HOTTEST SHOW ON EARTH (1978)

Macmillan Films, Inc.; 34 MacQuesten Parkway South;
Mount Vernon, NY 10550
Price: Rental - $35.00 Level: 10-12
Purchase - $350.00

This 28-minute film presents insulation as a method of conserving energy, using visual devices to illustrate the best ways to conserve fossil fuels. The film shows the use of infrared photos to check heat loss, actual installation of insulating materials, interviews with people on the street, and solid scientific data.

HOW TO MAKE A SOLAR HEATER (1976)

Handel Film Corporation; 8730 Sunset Blvd.;
West Hollywood, CA 90069
Price: Purchase - $290.00 Level: 7-12

This film explains the principle of solar energy, using a first generation-type solar collector. It demonstrates the step-by-step construction of a functional solar heater at a cost of about $100.00.

HOW TO SQUEEZE MORE MILES FROM YOUR CAR

Walter J. Klein Co., Ltd.; 6301 Carmel Road;
Charlotte, NC 28211
Price: free 24-hour loan Level: 10-12
Purchase - $275.00

This quarter-hour color film reveals many tricks motorists can use to increase gasoline mileage dramatically. Split-screen images are used to demonstrate how to drive and maintain a car for best mileage.

2. 16mm Films and Videocassettes

INCIDENT AT BROWN'S FERRY (1977)

Time-Life Multimedia; Time and Life Building;
New York, NY 10020
Price: Rental - $60.00 Level: 10-12
Purchase - $550.00 (16mm film)
$275.00 (videocassette)

A fire occurred in 1975 at the world's largest nuclear power plant. This film examines the details of this incident and the larger question of reactor safety in America's nuclear energy program.

INTRODUCTION TO OIL AND GAS OPERATIONS OFFSHORE (1977)

Continental Oil Company, Public Relations Department;
P. O. Box 2197; Houston, TX 77001
Price: free loan Level: 10-12

In 27 minutes this film shows how oil and gas are produced from offshore areas. It includes a look at the drilling process, living facilities, safety measures, environmental protection measures, and methods of transportation.

THE INVISIBLE POWER OF COAL

Society of Mining Engineers of the American Institute of
Mining and Metallurgical Engineers; 540 Arapeen Drive,
P. O. Box 8800; Salt Lake City, UT 84108
Price: Contact source for price information. Level: 10-12

This 28-minute color film looks at the history of coal. It documents the role coal has played in generating power, making steel, and serving industry as a raw material.

2. 16mm Films and Videocassettes

IS A CAREER IN ATOMIC ENERGY FOR YOU? (1974)

Counselor Films, Inc.; 2100 Locust Street;
Philadelphia, PA 19103
Price: Rental - $50.00 (1 week) Level: 7-12
Purchase - $220.00

Designed as a tool to explain possible career opportunities in the field of nuclear energy, this film can be used as an overview of nuclear power. A study guide is included.

JOEY'S WORLD (1974)

Southern California Edison and Bosustow Productions;
1649 11th Street; Santa Monica, CA 90404
Price: Purchase - $300.00 Level: 7-12

This 23-minute color film traces the energy needs of Joey, an American child living in a world of affluence. In discussing the need to find new and safe ways of maintaining our lifestyle, the film touches on some of the advantages of nuclear energy.

THE LAST RESORT (1977)

Green Mountain Post Films; Box 177; Montague, MA 01351
Price: Contact source for price information. Level: 10-12

This is an award-winning 60-minute color documentary on the citizens' protest against the Seabrook, New Hampshire, nuclear power plant. The controversy over the safety and benefits of such plants is continuing.

LEARNING ABOUT HEAT

Encyclopedia Britannica Educational Corporation;
425 North Michigan Avenue; Chicago, IL 60611
Price: Purchase - $220.00 Level: 4-9

Through laboratory demonstrations interwoven with animated episodes, this 15-minute color film discusses the molecular basis of heat; friction; changes of state in gases, solids, and liquids; and the transfer of heat. It also discusses the energy dilemma, focusing on decreasing supplies of fossil fuels.

2. 16mm Films and Videocassettes

LEARNING ABOUT NUCLEAR ENERGY

Encyclopedia Britannica Educational Corporation;
425 North Michigan Avenue; Chicago, IL 60611
Price: Purchase - $220.00 Level: 4-9

This 15-minute color film uses microphotography, animation, and simple demonstrations to show changes in the nuclear composition of the atom which release nuclear energy. These techniques provide the viewer with a basic understanding of the terms "nuclear fusion" and "nuclear fission."

LIVING WITH ENERGY (revised 1979)

Modern Talking Picture Service; 2323 New Hyde Park Road;
New Hyde Park, NY 11040
Price: free loan Level: 7-12
(Available only in the following states: MI, IN, WI, IL, MN, IA, MO, ND, KS, NE, OK, MT, WY, CO, SD.)

Living with Energy is a 28-minute color documentary about our energy resources, their uses, and their conservation. A companion teacher's guide with student spirit masters is available for $1.00 (by check only) from Amoco Teaching Aids; P. O. Box 1400K; Dayton, Ohio 45414.

LOOK TO THE SUN (1977)

Department of Energy Film Library, Technical Information
Center (TIC); P. O. Box 62; Oak Ridge, TN 37830
Price: free loan Level: 7-12

This 12-minute film explains the flat plate solar collector. It demonstrates how to design, finance, and build residential solar systems.

2. 16mm Films and Videocassettes

MAC'S MILL (1978)

Bullfrog Films Inc.; Oley, PA 19547
Price: Rental - $23.50 Level: 7-12
Purchase - $180.00

Mac's Mill, a 12-minute film about appropriate technology, offers an example of a practical solution to an energy problem. Mac Armstrong, who farms 200 acres of woodland, uses the energy of a stream to power his sawmill.

THE MAGIC OF REFINING

American Petroleum Institute; 2101 S Street, N. W.;
Washington, D. C. 20037
Price: free loan Level: 7-12

Cartoons and still photographs are used to make The Magic of Refining an entertaining and informative look at one aspect of the oil industry. The color film, which runs 12 minutes, looks at what oil is, how we use it, and some of the things it can do.

MAKING AND USING ELECTRICITY

Time-Life Films Incorporated; Time and Life Building;
New York, NY 10020
Price: Contact source for price information. Level: 1-9

This 20-minute film introduces basic concepts of energy, demonstrates how energy can be converted from one form to another, and explains electricity storage. It shows how an electric current can be generated by means of fuel cells, solar cells, and hydroelectric systems.

MAN'S BASIC NEED--NATURAL RESOURCES (1969)

Encyclopedia Britannica Educational Corporation;
425 North Michigan Avenue; Chicago, IL 60611
Price: Rental - $6.00 Level: 1-6

This color film shows the use and misuse of natural resources, demonstrated by a study of 2 towns in New Mexico: a deserted mining town and a rich farming community. Running time is 11 minutes.

2. 16mm Films and Videocassettes

MATTER INTO ENERGY (revised 1978)

Centron Films; 1621 West 9th Street; Lawrence, KS 66004
Price: Purchase - $165.00 Level: 4-9

This color film is a comprehensive introduction to nuclear energy employing live action photography and complex animation. The film explains nuclear fission and nuclear fusion in graphic terms.

THE MIGHTY ATOM (1967)

McGraw-Hill Textfilms; 1221 Avenue of the Americas;
New York, NY 10020
Price: Rental - $8.50 Level: 7-12

This 25-minute color film treats the constructive uses of atomic energy, showing developments in nuclear power generation, food preservation, and cancer treatment. The film also points to possible new uses resulting from recent research.

THE MINERALS CHALLENGE (1970)

Society of Mining Engineers of the American Institute of
Mining and Metallurgical Engineers; 540 Arapeen Drive,
P. O. Box 8800; Salt Lake City, UT 84108
Price: Contact source for price information. Level: 10-12

This color film shows how our ever-increasing needs for fuels, metals, and other minerals are being met by technological advances. It depicts surface and underground mining, petroleum and natural gas operations, and research to extract oil from oil shale deposits.

2. 16mm Films and Videocassettes

MINING AND THE ENVIRONMENT--STRIKING A BALANCE

American Petroleum Institute; 2101 L Street, N. W.;
Washington, D. C. 20037
Price: free loan Level: 10-12

This 13-minute color film presents the story of how the mineral wealth of the earth can be mined in harmony with the environment. A balance is proposed for meeting our energy needs while preserving our natural heritage through a program of reclamation and cultivation of mined lands.

MODERN ENGINES AND ENERGY CONVERSION (revised 1978)

Centron Films; 1621 West 9th Street; Lawrence, KS 66044
Price: Purchase - $200.00 Level: 4-9

This color film points out that machines which use chemical energy from fuel do much of the work in today's world. Various types of engines are analyzed and compared, and the film culminates with an animation of the proposed satellite solar power station.

MORE NUCLEAR POWER STATIONS

Green Mountain Post Films; P. O. Box 177; Montague, MA 01351
Price: Contact source for price information. Level: 10-12

This 55-minute color documentary from Denmark explains the cycle of fuel usage in the nuclear industry. It presents an ominous picture of the machinery of the nuclear age.

2. 16mm Films and Videocassettes

THE NEED FOR NUCLEAR ENERGY: OUR ENERGY OPTIONS (1975)

Atomic Industrial Forum; 7101 Wisconsin Avenue;
Washington, D. C. 20014
Price: Purchase - $150.00 Level: 9-12
$100.00 (videotape)

Featuring Dr. Walter Meyer of the University of Missouri, this film examines the U. S. energy outlook through the year 2000 and analyzes the economics and availability of various energy sources over the next thirty years. The emphasis is on nuclear economics.

THE NEW ALCHEMISTS (1975)

Benchmark Films, Inc.; 145 Scarborough Road;
Briarcliff Manor, NY 10510
Price: Contact source for price information. Level: 4-12

This 29-minute sound film shows a group of scientists and their families successfully working an experimental plant and fish farm near Falmouth, Massachusetts. It explains their use of organic fertilizers for aquaculture, and solar heat and windpower for energy.

THE NEW FACE OF SAUDI ARABIA

American Petroleum Institute; 2101 L Street, N. W.;
Washington, D. C. 20037
Price: free loan Level: 10-12

Saudi Arabia has dramatically developed its economic capabilities through oil revenues. This 20-minute color film looks at the country's modern developments, including manufacturing plants, schools, and medical installations.

2. 16mm Films and Videocassettes

NO ACT OF GOD (1978)

Bullfrog Films Inc.; Oley, PA 19547
Price: Rental - $38.50 Level: 7-12
Purchase - $395.00

In this 28-minute documentary, 4 nuclear experts discuss the pros and cons of the breeder reactor. The lack of safe waste disposal systems, the threat of terrorist activity, and the proliferation of plutonium for weapons emerge as conclusive arguments against nuclear power stations.

NO SHORT CUTS

Interstate Oil Compact Commission; Box 53127;
Oklahoma City, OK 73105
Price: free loan Level: 7-12
(return postage required)
Purchase - $90.00

This 20-minute documentary provides a layman's approach to understanding oil and gas exploration and production. It emphasizes the need for cooperative planning among production, conservation, and environmental interests in order to prolong the life of existing resources and prepare for the future.

NUCLEAR POWER: AN INTRODUCTION (1975)

Atomic Industrial Forum; 7101 Wisconsin Avenue;
Washington, D. C. 20014
Price: Purchase - $150.00 Level: 9-12
(16mm film)
$100.00 (videocassette)

Featuring Dr. E. Linn Draper of the University of Texas, this film offers a discussion of the way nuclear energy is used to make electricity. Details are given of the four U. S. reactor types and of the basic safety systems of light water reactors.

2. 16mm Films and Videocassettes

NUCLEAR POWER: PRO AND CON (1977)

McGraw-Hill Films; 1221 Avenue of the Americas;
New York, NY 10020
Price: (Part 1 - pro) Level: 10-12
Rental - $40.00
Purchase - $385.00
(Part 2 - con)
Rental - $40.00
Purchase - $385.00

This color presentation, which is also available in videocassette, presents both sides of the nuclear power controversy. The arguments center on 3 key issues: economics, safety, and the environment. (Note: Parts 1 and 2 run 25 minutes each.)

NUCLEAR REACTION IN WYHL

Green Mountain Post Films; Box 177; Montague, MA 01351
Price: Contact source for price information. Level: 10-12

This film is an enlargement of an 8mm home movie depicting the events around the Wyhl occupation, a citizens' action against construction of a nuclear power plant in West Germany. The film runs 15 minutes and is in color.

NUCLEAR REACTOR SAFETY: AN OVERVIEW (1976)

Atomic Industrial Forum; 7101 Wisconsin Avenue;
Washington, D. C. 20014
Price: $100.00 Level: 11-12

On this videotape program, Dr. Norman Rasmussen of the Massachusetts Institute of Technology discusses reactor safety, risk-benefit considerations, and the need for nuclear energy. This program is best suited for advanced high school students.

2. 16mm Films and Videocassettes

OFFSHORE OIL DRILLING

WNET/13 Media Services; 356 West 58th Street;
New York, NY 10019
Price: Purchase - $245.00 Level: 10-12
(videocassette or videotape)

This 30-minute color program, "MacNeil/Lehrer Report" number 3192, focuses on the nation's hunt for new oil resources. Offshore oil may be the United States' best bet for oil independence--but how should it be handled?

OIL (1973)

American Petroleum Institute; 2101 L Street, N. W.;
Washington, D. C. 20037
Price: free loan Level: 10-12

This 18-minute color film is a brief survey of the oil industry. It begins by illustrating how oil was formed and how it is located, proceeds to show sequences of drilling and transportation of crude oil to the refinery, and concludes with a survey of the uses of oil and its derivatives.

OIL--FROM FOSSIL TO FLAME

Centron Films; 1619 W. 9th St.; Lawrence, KS 66044
Price: Purchase - $205.00 Level: 4-8

This film illustrates the importance of petroleum as a raw material, as well as a foremost energy source. It shows how oil was formed, traces the history of the petroleum industry, and details methods of locating, drilling, transporting, refining, and using oil and other petroleum products.

OIL ON THE RIVER

Stuart Finley, Inc.; 3428 Mansfield Rd.;
Falls Church, VA 22041
Price: Purchase - $200.00 Level: 7-12

The special problem of oil pollution of water is treated as "Mr. Ohio River" describes his distress caused by floating pollution and explains the proper procedures for handling oil to prevent spills. Running time for this color film is 23 minutes.

2. 16mm Films and Videocassettes

THE OIL WEAPON

Films, Inc.; 733 Green Bay Rd.; Wilmette, IL 60091
Price: Rental - $40.00 (16mm film) Level: 7-12
Purchase - $575.00 (16mm film)
$400.00 (videocassette)

This 50-minute color film tells of an attempt in 1967 by the Arab oil producers to use oil as a weapon in their confrontation with Israel. The film uses an objective, non-accusatory tone in considering the international sparring over oil, treating a controversial topic in a manner that shculd lead to further study and productive discussion.

OIL WELL

Shell Film Library; 1433 Sadlier Circle W. Dr.;
Indianapolis, IN 46239
Price: free loan Level: 10-12

This 21-minute color film shows what goes on inside an oil well: drilling techniques, possible difficulties, and measures used to prevent accidents and pollution. Animation is used throughout the film to show land-based and offshore drilling, as well as other aspects of oil exploration.

THE OTHER WAY (1975)

Time-Life Multimedia; Time and Life Building;
New York, NY 10020
Price: Rental - $35.00 (16mm film) Level: 10-12
Purchase - $335.00 (16mm film)
$170.00 (videocassette)

This film examines the ideas of E. F. Schumacher, proponent of the "small is beautiful" ethic. His "other way" suggests a radically new approach for industry and agriculture through energy-conserving, simplified technology.

2. 16mm Films and Videocassettes

OUR MR. SUN (1956)

American Telephone and Telegraph Company, Information
Dept.; 195 Broadway; New York, NY 10007
Price: Contact source for price information. Level: 1-12

This 53-minute film, a pioneer in its genre, discusses the sun and its effect upon life on earth. It shows attempts to use the sun's energy to perform work now done by wood, coal, gas, and oil.

OVERSEAS VENTURE--NORTH SEA

American Petroleum Institute; 2101 L St., N. W.;
Washington, D. C. 20037
Price: free loan Level: 10-12

This color film describes the construction of the world's first computer-controlled natural gas processing and production system in the North Sea. Running time is 28 minutes.

P.O.G.O.--PENNZOIL OFFSHORE GAS OPERATORS

Modern Talking Picture Service; 2323 New Hyde Park Rd.;
New Hyde Park, NY 11040
Price: free loan Level: 7-12

Spurred by increasing energy shortages, the people of P.O.G.O. entered the race to find new deposits of natural gas. This 23-minute color documentary describes their task and their accomplishments.

THE PARADOX OF PLENTY (1977)

The Magic Lantern; Carlton Center, 925 Penn Avenue;
Pittsburgh, PA 15222
Price: Purchase - $158.00 Level: 7-12

Don ("Mr. Wizard") Herbert hosts this 22-minute color film. It traces our historical dependence on oil and gas and emphasizes the need to make greater use of coal and uranium in the future.

2. 16mm Films and Videocassettes

PEDAL POWER (1978)

Bullfrog Films Inc.; Oley, PA 19547
Price: Rental - $28.50 Level: 7-12
Purchase - $250.00

This film traces the history of pedal power from Leonardo da Vinci to the present day. As we begin to redefine energy efficiency in terms of matching the appropriate energy source to the task at hand, people are turning to pedal power on homesteads, in heart clinics, and in home industry.

THE PLUTONIUM CONNECTION (1975)

Time-Life Multimedia; Time and Life Building;
New York, NY 10020
Price: Rental - $60.00 Level: 10-12
Purchase - $590.00

One of the major problems associated with nuclear power plants is that of safe disposal of radioactive wastes. This 60-minute color film examines the potential for such material to be lost or stolen.

POOLING AROUND (1977)

Continental Oil Co., Public Relations Department;
P. O. Box 2197; Houston, TX 77001
Price: free loan Level: 7-12

This short film showcases a highly-successful van-pooling program developed by Conoco for its employees. Each commuter van replaces 11 cars, reducing traffic congestion and air pollution while cutting gasoline consumption and saving money.

2. 16mm Films and Videocassettes

POWER FROM THE ATOM

Great Plains Instructional TV Library, University of Nebraska;
P. O. Box 80669; Lincoln, NE 68501
Price: Contact source for price information. Level: 4-9

This videotape presents various aspects of atomic energy: nuclear fusion, basic components and safeguards of a nuclear power plant, innovative applications of atomic power such as brine desalinization and agricultural uses, and ecological considerations. Running time is 30 minutes.

POWER FROM THE SUN (1961)

Hearst Metrotone News; 235 East 45th St.;
New York, NY 10017
Price: Contact source for price information. Level: 7-12

This 5-minute sound film describes experiments to develop new ways of harnessing solar power. It shows America's first solar home in which the sun's rays serve as a source of heat and power.

PROBLEMS OF CONSERVATION--MINERALS (1969)

Encyclopedia Britannica Educational Corp.;
425 N. Michigan Ave.; Chicago, IL 60611
Price: Rental - $7.00 Level: 7-12

This 16-minute color film introduces a variety of mineral resources vital to the U. S. economy and way of life. It also describes the non-renewable features of mineral resources and current efforts directed toward their conservation.

2. 16mm Films and Videocassettes

PRODUCING OIL (1974)

American Petroleum Institute; 2101 L St., N. W.;
Washington, D. C. 20037
Price: Purchase - $300.00 Level: 10-12

A basic explanation of the process used to get oil and gas out of the reservoir and into the pipeline is provided by this 25-minute color film. Special emphasis is placed on the fact that oil and gas production is compatible with environmental concerns.

PROFILE OF A COAL MINE

Continental Oil Company, Public Relations Department;
P. O. Box 2197; Houston, TX 77001
Price: free loan Level: 7-12

This 28-minute film shows how modern methods have improved the process of mining coal, both in deep underground mines and in open strip mines. The restoration of mined areas to productive use is fully illustrated.

PROFILE OF A MODERN MINING COMPANY (1973)

American Petroleum Institute; 2101 L St., N. W.;
Washington, D. C. 20037
Price: free loan Level: 10-12

Surface mining and reclamation techniques are depicted with basic explanations of how coal is mined both above and underground. The color film has a running time of 24 minutes.

PROJECT SAGE (1977)

Department of Energy Film Library, Technical Information
Center (TIC); P. O. Box 62; Oak Ridge, TN 37830
Price: free loan Level: 7-12

This 9-minute film documents the installation of solar collectors in a small apartment complex. The relatively simple process is seen through the eyes of the tenants.

2. 16mm Films and Videocassettes

A QUESTION OF BALANCE

Consumers Power Co.; 212 West Michigan Ave.;
Jackson, MI 49201
Price: Contact source for price information. Level: 7-12

This 29-minute sound film explains the role of the electric power industry in maintaining an adequate power supply. This role is discussed in relation to increasing energy demand, fuel shortages, public opposition to nuclear power, and the need to protect the environment.

A QUESTION OF VALUES (1972)

The New Film Co., Inc.; 331 Newbury St., Department H;
Boston, MA 02115
Price: Rental (1-day) - $35.00 Level: 10-12
Purchase - $350.00

This 28-minute documentary deals with a proposal to build an oil refinery off the coast of Maine and presents the diverse attitudes and opinions of people on both sides of the issue. The film encourages insight not only into the specific situation in Maine, but also into the essential dilemma presented by our increasing need for energy supplies and our desire for environmental protection.

THE QUIET REVOLUTION

National Rural Electric Cooperative Association;
2000 Florida Ave., N. W.; Washington, D. C. 20009
Price: Rental - $30.00 Level: 4-12
Purchase - $100.00

Narrated by actor Burgess Meredith, The Quiet Revolution is a 27-minute color film which chronicles the history of rural electrification. Present conditions and future needs are also discussed.

2. 16mm Films and Videocassettes

QUIET RIVERS (1978)

Bechtel Corporation, Engineers-Constructors; 50 Beale St.,
P. O. Box 3965; San Francisco, CA 94119
Price: Contact source for price information. Level: 7-12

The coal-slurry pipeline is an alternative to rail transport for moving large amounts of coal over great distances. This 29-minute color/sound film explains how a slurry pipeline works.

RADIATION AND HEALTH

Green Mountain Post Films; Box 177; Montague, MA 01351
Price: Contact source for price information. Level: 10-12

Although the effects of radiation have been studied for many years, there is still a dispute in scientific circles over the hazards of nuclear power generation. This 15-minute black and white film presents the contrasting views of Dr. Helen Caldicott, an anti-nuclear activist and pediatrician, and Reginald C. Rogers, a nuclear supporter and Director of Radiological Assessment for Northeast Utilities, Inc.

THE RECLAIMERS

Society of Mining Engineers of American Institute of
Mining and Metallurgical Engineers; 540 Arapeen Drive,
P. O. Box 8800; Salt Lake City, UT 84108
Price: Contact source for price information. Level: 10-12

This color film tells the story of surface mining, showing technological efforts to supply low-cost energy and reclamation procedures which continue for years after coal is removed from the mining site. Running time is 17 minutes.

2. 16mm Films and Videocassettes

RECYCLING OUR RESOURCES

Paramount Communications; 5451 Marathon St.;
Hollywood, CA 90038
Price: Rental - $20.00 Level: 4-9
Purchase - $160.00

Recycling saves energy in manufacturing and industry. This 10-minute color film illustrates the importance of conservation and recycling and explains methods for salvaging glass, metal, and paper.

REFINERY

American Petroleum Institute; 2101 L St., N. W.;
Washington, D. C. 20037
Price: free loan Level: 10-12

Refinery, a 15-minute film which recounts how crude oil provides many useful products, highlights the scientific and economic principles behind refining. Animated sequences show how molecules are changed and reformed.

REPORT FROM SUNWORKS (1978)

Sunworks, Division of Enthone, Inc.; P. O. Box 1004;
New Haven, CT 06508
Price: $75.00 Level: 7-12

This 12-minute film looks at residential use of solar energy with an emphasis on solar domestic water heating. The film includes installation procedures, advantages of solar water heating, and examples of savings from across the country through use of solar energy.

2. 16mm Films and Videocassettes

RESERVED FOR TOMORROW

Modern Talking Picture Service; 2323 New Hyde Park Road;
New Hyde Park, NY 11040
Price: free loan Level: 10-12

This 14-minute color documentary describes how oil reserves are being stored in underground salt domes along the Gulf Coast. By 1985, the Federal government will have sponsored storage of one billion barrels of crude oil for use during interruption of foreign oil supplies.

THE RETURNING BALANCE

Continental Oil Company, Public Relations Department;
P. O. Box 2197; Houston, TX 77001
Price: free loan Level: 10-12

This 28-minute film illustrates the need for a better balance between environmental and energy goals. Produced with sound and music (no narration), The Returning Balance can be used as a prelude to environmental discussions.

THE ROAD TO ENERGY, U.S.A.

Association Films; 866 Third Ave.; New York, NY 10022
Price: free loan Level: 7-12

This color film, featuring Bob Hope, is available in both 28-minute and 14-minute versions. It deals with the work of thousands of people whose goal is to provide more energy for America.

SAVING ENERGY ON THE ROAD (1976)

Ramsgate Films; 704 Santa Monica Blvd.;
Santa Monica, CA 90401
Price: Rental - $20.00 Level: 10-12
Purchase - $225.00

This film includes 4 sequences--choosing the right car, driving techniques, auto maintenance, and driving less--which demonstrate ways an automobile driver can save money and fuel. The color film has a running time of 15 minutes.

2. 16mm Films and Videocassettes

SCRAP: THE SUPERNATURAL RESOURCE (1976)

Modern Talking Picture Service; 2323 New Hyde Park Road;
New Hyde Park, NY 11040
Price: free loan Level: 7-12

This 29-minute color film provides a close-up of the modern scrap processing industry. It emphasizes the conservation of energy and irreplaceable natural resources through the recycling of scrap iron and steel.

SEA AREA FORTIES (1975)

American Petroleum Institute; 2101 L Street, N. W.;
Washington, D. C. 20037
Price: free loan Level: 10-12

Within a few years the North Sea will provide oil for all of Britain and much of Europe. This 29-minute color film tells the story of how British Petroleum developed its Forties Field and began to bring oil ashore in quantity.

SEA ROBIN

American Petroleum Institute; 2101 L Street, N. W.;
Washington, D. C. 20037
Price: free loan Level: 10-12

This color film runs 22 minutes and portrays the building of the 200-mile, $86.6 million Sea Robin pipeline system. Located off the Louisiana coast, this pipeline brings ashore natural gas from the Gulf of Mexico.

SEA VENTURE

American Petroleum Institute; 2101 L Street, N. W.;
Washington, D. C. 20037
Price: free loan Level: 10-12

The men who search for oil under the oceans are the modern counterparts of those who have braved the sea for centuries. This 29-minute color film takes a poetic look at the exciting and demanding activity of offshore drilling.

2. 16mm Films and Videocassettes

SEABROOK--DO WE NEED IT? (1977)

The Public Television Library (PBS);
475 L'Enfant Plaza, S. W.; Washington, D. C. 20024
Price: Rental (2-week) - $68.00 Level: 10-12
Purchase - $175.00

This 29-minute videocassette traces the 4-year history of the partially-completed nuclear power plant in Seabrook, N. H., and examines the larger question of who decides how much power we need and how we will get it. The program explores the nuclear safety issue, the problem of waste disposal, and possible alternative energy sources.

SENTENCED TO SUCCESS

Green Mountain Post Films; Box 177; Montague, MA 01351
Price: Purchase - $625.00 Level: 10-12

This film follows the long struggle by the local Atomic Energy Workers Union to inform the French public about hazards to workers in the La Hague nuclear fuel reprocessing center in Normandy, France. The film runs 60 minutes and is in color.

SOLAR DOMESTIC HOT WATER

National Solar Heating and Cooling Information Center;
P. O. Box 1607; Rockville, MD 20850
Price: Contact source for Level: 10-12
price information.

This 16-minute film shows a typical solar water heating system being installed on an existing home. The retrofit application provides enough hot water for a family of five.

2. 16mm Films and Videocassettes

SOLAR ENERGY (A Series, 1974)

The Public Television Library; 475 L'Enfant Plaza, S. W.;
Washington, D. C. 20024
Price: Contact source for price information. Level: 10-12

This is a series of six 30-minute videocassettes which deals with solar energy. Individual titles are:

PHASE ZERO

Phase Zero examines where solar technology is now and where it might be taking us. Some solar technologies may help to ease our present energy problem and eventually harness the full potential of the sun, perhaps leading us to a day when there may be no energy problem at all.

THE THEORY IS TESTED

This program looks at the prospect of a home fully heated by solar energy. It shows how the new systems will work, when they will be available, and how much they will cost.

THE DO-IT-YOURSELF GUIDE TO SOLAR LIVING

This program looks at what people are doing today to take advantage of solar energy. It explains some of the simple, inexpensive concepts that are being used and reviews solar hardware already tested and on the market.

POWER

Power looks at ways energy is made available by the sun. Newly-found methods to convert the sun's radiation into electricity, even synthetic fossil fuels, are explained.

2. 16mm Films and Videocassettes

SOLAR ENERGY (A Series, 1974), Continued

THE SOLAR SCENARIO

This program takes a look ahead to the time when sun-power may be the only energy source man will need. Some ideas to exploit the sun's energy border on science fiction--from recycling the waste products of human breath for use as energy to solar power stations in orbit around the earth.

THE SOLAR DECISION

The Solar Decision questions the role of the U. S. government and the politics of solar energy. How solar technology may dominate the 21st century and redefine "power politics" are the primary topics covered.

SOLAR ENERGY--THE GREAT ADVENTURE (1979)

Department of Energy Film Library, Technical Information Center (TIC); P. O. Box 62; Oak Ridge, TN 37830
Price: free loan Level: 7-12

This film features some pioneers in alternative energy and shows their work at various locations in the United States. It is narrated by actor Eddie Albert.

SOLAR ENERGY TODAY (1976)

Center for Energy Policy and Research, New York Institute of Technology; Old Westbury, NY 11568
Price: Deposit - $25.00 Level: 10-12
(to be refunded when cassette is returned)

This 55-minute videocassette presents an interview with Fred S. Dubin, nationally recognized expert in the application of solar energy and the design of energy-conserving buildings and operating systems. The program is illustrated with photographs of solar homes and other installations and contains related material on the selection, design, effectiveness, and aesthetics of practical solar energy systems.

2. 16mm Films and Videocassettes

THE SOLAR FRONTIER (1978)

Bullfrog Films Inc.; Oley, PA 19547
Price: Rental - $33.50 Level: 7-12
Purchase - $350.00

This film features 3 solar houses built for average families in the Canadian snowbelt and includes an explanation by the architects and the people who live in them. These homes are comfortable, simple, and attractive because they are responsive to the outside environment.

THE SOLAR GENERATION (1976)

Stuart Finley, Inc.; 3428 Mansfield Road;
Falls Church, VA 22041
Price: Rental - $35.00 Level: 7-12
Purchase - $350.00

This color film traces solar research from Archimedes to today's solar cell program which is attempting to greatly reduce the cost of solar usage. Running time is 21 minutes.

THE SOUTH TEXAS PROJECT (1977)

Joe Kelley Film Productions; 4806 Avenue C;
Corpus Christi, TX 78410
Price: Purchase - $285.00 Level: 7-12

This 20-minute color film tells the story of the construction of a nuclear-powered electric generating plant at Bay City, Texas. It demonstrates the need for nuclear power, how the plant works, how it will influence life in the community, and describes the search for other new sources of energy.

2. 16mm Films and Videocassettes

SPOKANE RIVER

Northwest Film Productions; P. O. Box 1030;
Spokane, WA 99210
Price: Purchase - $325.00 Level: 4-12

Spokane River, a 24-minute color documentary, shows how the Spokane River in Washington was harnessed for the production of hydroelectric power. It includes some historical information on the area served with the electricity produced by the river.

STRIP MINED LAND CAN BE RECLAIMED (1974)

Tennessee Valley Authority; Chattanooga, TN 37401
Price: Contact source for price information. Level: 10-12

This color film demonstrates what can and has been done to restore strip mined lands after coal mining. Running time is 20 minutes.

STRIPMINING IN APPALACHIA (1973)

Appalshop, Inc.; 118 Main St., Box 743; Whitesburg, Ky 41858
Price: Rental - $35.00 Level: 10-12
Purchase - $250.00

Stripmining in Appalachia is a 25-minute black and white film that vividly portrays the environmental effects of our all-out rush for energy and its impact on the lives of people who live near stripmining sites. The essence of the film is an uncompromising look at contrasting values.

SUN POWER FOR FARMS (1977)

U. S. Department of Energy Film Library, Technical Information Center (TIC); P. O. Box 62; Oak Ridge, TN 37830
Price: free loan Level: 7-12

This 12-minute film shows how American farmers may soon begin to harness the sun in new ways. Some recent technological breakthroughs are documented.

2. 16mm Films and Videocassettes

THE SUN'S ENERGY

Academy Films; P. O. Box 38753; Hollywood, CA 90038
Price: Rental - $21.00 Level: 5-9
Purchase - $210.00

This 17-minute color film explains why the sun's energy is the basis of all life on earth and the origin of all types of industrial energy, except atomic energy. It also describes how scientists have discovered ways of using solar energy more directly, benefiting both industry and the consumer.

THE TERRIBLE NEWS (1978)

Bitterroot Films; Hammond Arcade; Missoula, MT 59801
Price: Rental - $35.00 Level: 7-12
Purchase - $250.00

This is a 17-minute, color/sound film which deals with the relationship between natural and industrial energy systems. It might be used to stimulate inquiry into energy and environmental issues.

THERE'S COAL IN THEM THAR HILLS (1976)

Time-Life Multimedia; Time and Life Building;
New York, NY 10020
Price: Rental - $25.00 Level: 10-12
Purchase - $290.00 (16mm film)
$130.00 (videocassette)

This film looks at the problems arising from increased coal production. One of the biggest difficulties is the conflict between ranchers, owners of the surface rights to land, and coal companies which own the minerals below.

THREE E'S: ENERGY, ECONOMICS, ENVIRONMENT

American Petroleum Institute; 2101 L Street, N. W.;
Washington, D. C. 20037
Price: free loan Level: 10-12

Energy, economics, and environment are the three subjects reviewed in this 27-minute color film. Commentary by recognized energy experts treats the interrelationships among the 3 areas.

2. 16mm Films and Videocassettes

TRANSPORTATION--THE WAY AHEAD (1977)

U. S. Department of Energy Film Library, Technical
Information Center (TIC); P. O. Box 62;
Oak Ridge, TN 37830
Price: free loan Level: 7-12

In the future, gasoline supply shortages may become a fact of everyday life. This 8-minute film describes efforts to make available new energy sources for automobiles.

TROUBLE IN COAL COUNTRY (1977)

Films, Inc.; 733 Green Bay Rd.; Wilmette, IL 60091
Price: Purchase - $420.00 Level: 10-12

This 52-minute color videocassette surveys the enormous problems of tapping our coal reserves. The film looks at mine management and labor unions; the impact of strip mining on surrounding areas; the costs of heavy mining equipment, land reclamation, and pollution control, and whether these costs are justified by their benefits.

USING NATURE (1970)

Utah State Board of Education; 250 E. Fifth South;
Salt Lake City, UT 84111
Price: Contact source for price information. Level: 4-6

This 15-minute color videocassette portrays the wise use of natural resources as one of the greatest challenges man has ever faced. During pioneer times, natural resources were important for different reasons then they are today

2. 16mm Films and Videocassettes

VENEZUELA: OIL BUILDS A NATION

Encyclopedia Britannica Educational Corporation;
425 N. Michigan Ave.; Chicago, IL 60611
Price: Purchase - $220.00 Level: 4-12

This film shows how the Venezuelan government hopes to remedy the country's high levels of unemployment and poverty by developing the vast, mineral-rich Guayana jungle. The 17-minute color film captures Venezuela as it is becoming one of the richest, fastest-developing countries of Latin America.

WATERGROUND (1977)

Appalshop, Inc.; 118 Main St., Box 743; Whitesburg, KY 41858
Price: Rental - $20.00 Level: 7-12
Purchase - $200.00

This 16-minute color film treats alternative energy and traditional rural values and lifestyles. It shows Walter Winebarger and his wife, who continue commercial operation of a water-powered gristmill that has been in the family for five generations.

WE WILL FREEZE IN THE DARK (1977)

McGraw-Hill Films; 1221 Avenue of the Americas;
New York, NY 10020
Price: Rental - $65.00 Level: 10-12
Purchase - $630.00

We Will Freeze in the Dark, a 42-minute color film, concentrates on the only immediate answer to the energy dilemma: conservation. It reports on the government's refusal to help a group of citizens who wanted to construct solar-heated buildings and tells how they eventually got support from a foreign oil-producing country.

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2. 16mm Films and Videocassettes

WHAT TIME IS THE POWER ON TODAY? (1974)

Storycraft, Inc.; 18630 Detroit Ave.; Lakewood, OH 44107
Price: Purchase - $125.00 Level: 4-12

This 26-minute color film portrays the problems and inconvenience that result in one community when a shortage of electricity causes service to be restricted to specified periods during the day and night. It illustrates what might happen if there is not enough fuel for electrical generation and new power plants cannot be built to satisfy public demand for power.

WHAT'S THE ENERGY CRISIS ALL ABOUT?

Association Films; 866 Third Ave.; New York, NY 10022
Price: Rental - $26.50 Level: 10-12

This 25-minute color film uses a mock-up of a typical American home to show how we have critically depleted our known stores of fossil fuels. It makes the point that the Arab oil embargo did not precipitate the energy crisis, that we were already in it and were due for drastic emergency measures before now.

WHERE DO WE GO FROM HERE? (1974)

BFA Educational Media; 2211 Michigan Avenue, P. O. Box 1795;
Santa Monica, CA 90406
Price: Rental - $18.00 Level: 10-12
Purchase - $210.00

This color film, which runs 15 minutes, reveals a conflict in American values--how to meet needs for both conservation of resources and economic growth. In the film a rancher, a coal company, and a manufacturer embody the conflicts between conservationist, energy producer, and American consumer.

2. 16mm Films and Videocassettes

WHICH ENERGY

Stuart Finley, Inc.; 3428 Mansfield Road;
Falls Church, VA 22041
Price: Rental - $35.00 Level: 7-12
Purchase - $350.00

This 23-minute color film explains how various alternative energy systems work, describes current energy research, and provides perspective in the complex and confusing energy field. The film concentrates on the technology of energy because political and economic factors tend to fall in place once available technical systems are understood.

WHY WE CONSERVE ENERGY: THE WITCH OF THE GREAT BLACK POOL

Learning Corporation of America; 1350 Avenue of the Americas;
New York, NY 10019
Price: Rental - $20.00 Level: 4-6
Purchase - $185.00

This 12-minute film with accompanying teacher's guide is a parable of children in an imaginary land run by machines which are powered by "black soup". The Witch of the Great Black Pool cuts off the town's "black soup" supply to warn the residents that they are exhausting their source of power and to present alternative means of obtaining energy for their machines.

WILDERNESS SCHOOL (1977)

Utah State Board of Education; 250 E. Fifth South;
Salt Lake City, UT 84111
Price: Contact source for price information. Level: K-6

This videocassette examines how a wilderness learning experience can teach students about ecology, solar energy, and man's place in the environment. Running time is 14 minutes.

2. 16mm Films and Videocassettes

WIND (1973)

Learning Corporation of America; 1350 Ave. of the Americas;
New York, NY 10019

Price:	Rental - $15.00 Purchase - $145.00	Level:	4-12

This is a 10-minute, animated color film which shows the wind as an integral part of our environment. Without dialogue or narration, the film depicts the many functions of the wind in our lives.

WORD TO THE WISE (1970)

Utah State Board of Education; 250 E. Fifth South;
Salt Lake City, UT 84111

Price:	Contact source for price information.	Level:	4-6

This 15-minute color film looks at the importance of natural resources to industry. It explores the central economic problem of how best to use the scarce resources upon which the quality of our lives depend.

WORKING TOGETHER TO CONSERVE ENERGY

Walter J. Klein Co., Ltd.; 6301 Carmel Rd.;
Charlotte, NC 28211

Price:	free 24-hour loan Purchase - $275.00	Level:	7-12

This quarter-hour color film shows how new cars are tested for fuel economy. Viewers are also given tips on how to get the most mileage from their own cars.

2. 16mm Films and Videocassettes

THE WORLD IN A GRAIN OF SAND (1977)

Bechtel Corporation, Engineers-Constructors;
P. O. Box 3695, Fifty Beale Street; San Francisco, CA 94119
Price: Contact source for price information. Level: 7-12

This 25-minute color/sound film tells the story of the Syncrude Project, the biggest extraction plant of its kind in the world. The Syncrude plant produces 125,000 barrels of synthetic crude oil per day from the Athabasca Tar Sands of Canada.

WORLD OF ENERGY

Consumers Power Co.; 212 W. Michigan Ave.;
Jackson, MI 49201
Price: Contact source for price information. Level: 7-12

This 28-minute film portrays major development and turning points in the history of energy production. It talks about protection of the environment, resource recovery, the role of transportation, and the efficient use of energy.

A WORLD OF ENERGY (1978)

Modern Talking Pictures Service; 2323 New Hyde Park Rd;
New Hyde Park, NY 11040
Price: free loan Level: 7-12

This 14-minute film discusses the energy problem and possible alternatives to our heavy dependence on oil and natural gas. The narrator is Dr. John McKetta of the University of Texas.

YARDAGE, MILEAGE, AND ENERGY

Modern Talking Picture Service; 2323 New Hyde Park Rd;
New Hyde Park, NY 11040
Price: free loan Level: 10-12

Professional golfer Jack Nicklaus and automobile test driver Marta Nelson are featured in this 14-minute color film. The focus is conservation of strokes and gasoline.

3. Slides, Filmstrips, and 8mm Filmloops

ALTERNATIVE ENERGY (1978)

Atlantic Richfield Company, Films and Publications Services;
P. O. Box 2679 - T. A.; Los Angeles, CA 90051
Price: free loan Level: 7-12

As the production of crude oil and gas diminishes, the need for alternative energy sources for the future becomes vital. This package of 2 filmstrips examines alternatives suitable for the near term and those which hold promise for the longer term.

AMERICA'S URBAN NEEDS (1974)

Society for Visual Education, Inc.; 1345 Diversey Parkway;
Chicago, IL 60614
Price: $18.50 (each filmstrip) Level: 3-6

This color/sound filmstrip series, which includes "Our Urban Needs: Electricity", and "Our Urban Needs: Transportation", deals with the needs of cities, particularly the electrical needs of homes and industry. Nuclear and conventional power generators are explained in the first strip; solutions of transportation problems are examined in the second.

ARABIAN PENINSULA: THE IMPACT OF OIL (A Series)

Encyclopedia Britannica Educational Corporation;
425 N. Michigan Ave.; Chicago, IL 60601
Price: $57.95 Level: 7-12

In the countries of the Arabian Peninsula, oil revenue is drastically and quickly changing the face of the land and the lives of the people. This series of 4 sound/color filmstrips examines the current burgeoning economic growth of the area and looks at efforts to prepare for the time when the oil will run out.

3. Slides, Filmstrips, and 8mm Filmloops

ATOMS AND SPACE (From The Series CHOOSING OUR NATION'S GOALS, 1977)

Society for Visual Education, Inc.; 1345 Diversey Parkway;
Chicago, IL 60614
Price: $19.50 Level: 4-6

This filmstrip pairs the invisible realm of the atom with the vast domain of space in depicting new frontiers of exploration. Peaceful uses of atomic energy are the focus of this film which is in full color, with illustrations, background music, and professional narration.

CAREERS IN ENERGY (A Series, 1976)

Ideal School Supply Co.; 11000 S. Lavergne Ave.;
Oak Lawn, IL 60453
Price: $79.50 Level: 7-12

Careers in Energy is a series of 4 filmstrips with accompanying sound cassettes which study the job outlook in major energy areas. Energy industries included are coal, petroleum, nuclear, solar, hydroelectric, tidal, geothermal, and wind.

CAREERS IN ENERGY

Pathescope Educational Media, Inc.; 71 Weyman Ave.;
New Rochelle, NY 10802
Price: $50.00 Level: 7-12

The 2 filmstrips in this packet show the increasing need for people trained for careers in the energy field. A teacher's manual and audiocassette are included.

3. Slides, Filmstrips, and 8mm Filmloops

COAL . . . OUR BURIED TREASURE (1975)

Indiana Coal Association; 632 Cherry Street;
Terre Haute, IN 47808
Price: free loan Level: 4-6

This 6-minute filmstrip provides an introduction to the process of coal mining. The use of coal and its importance to the American style of living is also discussed.

CONCEPTS IN SCIENCE, SET VIII

Eye Gate House; 146-01 Archer Ave.; Jamaica, NY 11435
Price: $110.00 Level: 4-12

This set of 8 filmstrips with audiocassettes is aimed at a better understanding of basic principles in physical science. Major emphasis is placed on energy--what it is, how we use it, and current dwindling supplies.

THE ECONOMICS OF THE ENERGY PROBLEM

Educational Enrichment Materials; 110 S. Bedford Rd.;
Mt. Kisco, NY 10549
Price: $20.00 Level: 9-12

With 6% of the world's population, the U. S. consumes 30% of the energy used throughout the world. This color/sound filmstrip describes our daily energy use and shows how energy shortages affect our economy.

ELECTRICITY (1976)

Society for Visual Education, Inc.; 1345 Diversey Parkway;
Chicago, IL 60614
Price: $99.00 Level: 4-9

This program demonstrates the production, transference, and uses of electricity and encourages the wise application of electricity in our daily lives. The set includes 6 color filmstrips, 6 records or cassettes, and 1 teacher's guide.

3. Slides, Filmstrips, and 8mm Filmloops

ENERGY (From The Series SCIENCE AND SOCIETY: AN INQUIRY INTO TECHNOLOGY AND VALUES, 1975)

Prentice-Hall Media; 150 White Plains Rd.;
Tarrytown, NY 10591
Price: $50.00 Level: 10-12

This program describes our inadequate energy resources, emphasizes the relationship between lifestyles and energy demands, and details alternative sources of energy. Included are 2 filmstrips, 2 cassettes or records, and 1 program guide.

ENERGY--A WORLD RESOURCES PROJECT

Xerox Films; 245 Long Hill Rd.; Middletown, CT 06467
Price: Contact source for price information. Level: 7-12

This filmstrip discusses worldwide energy problems and examines possible energy sources of the future. It comes with a record, cassette, and script.

ENERGY AND DOUBLING TIME (1978)

Science and Math Teaching Center, Michigan State University;
East Lansing, MI 48824
Price: $10.18 Level: 10-12

This 18-minute filmstrip discusses the implications of the United States' increase in energy use. Its intended purpose is to help students answer the question, "Is there really an energy crisis?".

ENERGY AND EVERDAY LIFE (A Series, 1978)

National Geographic Society, Educational Services;
Dept. 78; Washington, D. C. 20036
Price: $50.00 Level: 1-5

There are 3 filmstrips with audiocassettes in this series: "Sun, Wind, and Water", "Energy from the Earth", and "Saving Energy". The series concentrates on defining energy and introducing concepts about present energy sources, conservation, and potential future sources.

3. Slides, Filmstrips, and 8mm Filmloops

ENERGY AND OUR ENVIRONMENT (A Series, 1975)

Coronet Instructional Films; 65 E. South Water St.;
Chicago, IL 60601
Price: Contact source for price information. Level: 4-12

This 4-part series looks at various aspects of energy and its effects on the environment: functions of pollutants in energy conversion; use of solar and nuclear energy; relationships between increasing populations, energy shortages, and pollution; and an historical description of energy sources used by man. Each filmstrip comes with a record, cassette, and script.

ENERGY AND THE ENVIRONMENT--HOW TO LIVE ON THE EARTH A LONG TIME WITHOUT USING IT ALL UP (A Series, 1974)

Macmillan Films, Inc.; 34 MacQuesten Parkway, South;
Mt. Vernon, NY 10500
Price: Contact source for price information. Level: 7-12

This filmstrip series includes the following titles: "Harnessing New Sources of Energy", "Energy, Environment, and the Future", "Energy and Its Cost to Our Environment", and "Where Energy Comes From and Where It Goes". The series provides an in-depth treatment of energy; its sources, uses, future prospects; and its effects on our environment.

ENERGY AND YOU (A Series, 1975)

Society for Visual Education, Inc; 1345 Diversey Parkway;
Chicago, IL 60614
Price: $87.00 Level: 3-5

This series includes 6 filmstrips: "Energy: What Is It?", "Energy: Where Does It Come From?", "Energy: How Does It Work?", "Energy: Where Does It Go?", "Energy: How Do You Store It?", and "Energy: Using It Wisely". Each filmstrip is a full-color cartoon, about 9 minutes in length, with professional narration.

3. Slides, Filmstrips, and 8mm Filmloops

ENERGY ANT FILMSTRIP SET (1976)

National Audiovisual Center; Order Section NAVC;
Washington, D. C. 20409
Price: $12.50 Level: 4-6

This 2-part color filmstrip explains what energy is and how it can be conserved. Sound cassettes and teacher's guides are included.

THE ENERGY CRISIS (A Series)

Ideal School Supply Co.; 11000 S. Lavergne Ave.;
Oak Lawn, IL 60453
Price: $59.50 Level: 7-12

The Energy Crisis is a series of 3 color filmstrips and cassettes which study the conflicting needs and forces at the heart of our current energy crisis. The teacher's guide contains a complete script, an outline of objectives, suggestions for presentation, follow-up activities, and questions for evaluation.

THE ENERGY CRISIS (1973)

Educational Design, Inc.; 451 S. Jefferson; Orange, NJ 07050
Price: $99.00 Level: Special Education 5-12

This is a 2-part set of color slides with audiotape cassette or phonograph record designed to present basic energy concepts in an historical perspective, from the discovery of fossil fuels to the present. Also covered are environmental policies, political opinions, and consumer attitudes regarding the energy crisis.

THE ENERGY CRISIS

Educational Enrichment Materials; 110 S. Bedford Rd.;
Mt. Kisco, NY 10549
Price: $80.00 Level: 4-8

This 2-part program ("An Historical Review" and "Report from Planet 32") is produced in color and with sound. It reports on what is being done to maintain and replenish our diminishing energy sources as the nation's need for power grows.

3. Slides, Filmstrips, and 8mm Filmloops

ENERGY: CRISIS AND RESOLUTION (A Series)

United Learning; 6633 W. Howard St.; Niles, IL 60648
Price: $85.00 Level: 4-12

This 6-part series focuses on the different types of fuel sources. Titles of individual filmstrips are: "Introduction to Energy", Fossil Fuels--Coal", "Fossil Fuels--Oil and Natural Gas", "Electrical Energy", "Nuclear Energy", and "Alternatives for the Future".

ENERGY FOR THE FUTURE (1974)

Visual Education Consultants; Box 52; Madison, WI 53701
Price: $7.50 Level: 7-12

Scientists expect most of our world's supply of petroleum to be exhausted within our lifetime. This color filmstrip examines alternative energy sources ranging from the sun to nuclear fusion and discusses the advantages and disadvantages of each source.

ENERGY FOR TOMORROW (1976)

Educational Materials and Equipment Co.; 46 Lafayette Ave.;
New Rochelle, NY 10801
Price: $59.95 Level: 7-12

Three sound filmstrips are contained in this set: "Solar Energy", "Nuclear Energy", and "Energy Alternatives". Together they explore the new sources of energy on which we will rely in the future.

ENERGY IS WHERE YOU FIND IT

Atlantic Richfield Co., Films and Publications Services;
P. O. Box 2679 - T. A.; Los Angeles, CA 90051
Price: free loan Level: 7-12

Two separate filmstrips with audiocassettes comprise this package. The first program, "Oil and Alaska--A Modern Adventure", features the search for oil in Alaska; the second filmstrip, "Energy from Beneath the Sea", deals with oil and gas production from the outer continental shelf.

3. Slides, Filmstrips, and 8mm Filmloops

ENERGY LEARNING SYSTEMS SLIDE LIBRARY (SL-10)

Energy Learning Systems, Inc.; 390 Linebrook Rd.;
Ipswich, MA 01938
Price: $129.95 Level: 7-12

This collection of 200 slides (which should be referred to with the code number SL-10), covers 6 solar energy topics: solar energy availability, flat plate collectors, energy storage, concentrating solar collectors, measurement and control systems, and passive building systems. Contact source for information concerning purchase of slides covering a single topic only.

ENERGY SET

Creative Learning; P. O. Box 324; Warren, RI 02885
Price: $5.75 (each filmstrip) Level: 5-9
$10.00 (entire set)

Two captioned color filmstrips on aspects of power use form this set: "Power: The Use of Energy: Muscle, Wind, and Water"; and "Power: The Use of Energy: Combustion, the Atom, and the Sun". Part I analyzes ways in which man has used natural power in sailing ships, windmills, waterwheels, and hydraulic turbines; Part II looks at 3 types of energy with examples of the internal combustion engine, the atomic reactor, and various forms of radiant energy.

ENERGY SOURCES (A Series, 1972)

BFA Educational Media; 2211 Michigan Ave., P. O. Box 1795;
Santa Monica, CA 90406
Price: Contact source for price information. Level: 7-12

This series of filmstrips explores alternative methods for harnessing energy. Titles in the series include: "Batteries and Fuel Cells", "Engines and Turbines", "Fission", "Fossil Fuels", "Fusion", "Geothermal Power", "Hydroelectricity", and "Wind, Waves, and Sun".

3. Slides, Filmstrips, and 8mm Filmloops

ENERGY SOURCES: A NEW BEGINNING (A Series)

University of Colorado, Educational Media Center;
Stadium 360; Boulder, CO 80309
Price: $100.00 Level: 10-12

This is a series of 8 individual filmstrips with audiocassettes which describe alternative energy sources and alternative methods of recovering existing fossil fuel deposits. The following topics are covered: geothermal energy, nuclear energy, nuclear gas stimulation, oil shale, coal, solar power, tar sands, and wind power. (Note: A study guide is available for each filmstrip for $2.50.)

ENERGY: THE BIG E (A Series)

Aims Instructional Media, Inc.; 626 Justin Ave.;
Glendale, CA 91201
Price: $80.00 Level: 6-12

This color series, complete with audiocassettes, spells out the immediate causes of the energy crisis. It also describes the difficult problem of the relationship between economic growth and increasing energy use.

ENERGY: TO GROW, TO MOVE, TO CHANGE

Multi-Media Productions, Inc.; P. O. Box 5097;
Stanford, CA 94305
Price: $14.50 Level: 1-3

This sound filmstrip explains how everything needs energy to function and how energy makes things move. It describes the sun as our primary source of energy and discusses food and electrical energy.

3. Slides, Filmstrips, and 8mm Filmloops

ENERGY--TRANSACTIONS IN TIME (1974)

Westport Communications Group, Inc.; 155 E. State St.;
Westport, CT 06880

Price: Contact source for price information. Level: 10-12

This filmstrip, which comes with record and cassette, compares different sources of atomic energy, such as uranium, plutonium, and heavy hydrogen. It weighs their relative efficiencies as energy sources against their hazards and environmental effects.

ENERGY: TYPES AND CONSIDERATIONS

Prentice-Hall Media, ServCode HA 2; 150 White Plains Rd.;
Tarrytown, NY 10591

Price: $50.00 Level: 4-8

This set of 2 color filmstrips traces the energy needs of people throughout history and investigates several types of energy, from fossil fuels to nuclear energy. The program, complete with cassettes or records, encourages viewers to formulate new solutions to today's energy problems.

ENERGY: UNDERSTANDING AND MANAGING A CRITICAL RESOURCE (A Series)

Prentice-Hall Media; 150 White Plains Rd.;
Tarrytown, NY 10591

Price: $145.00 Level: 10-12

This set contains 5 full-color filmstrips with synchronized audiocassettes and a comprehensive 32-page teacher's guide. The series, which describes traditional and new energy sources and emphasizes ways to conserve energy, includes the following titles: "Energy: Concepts and Conversions", "Non-Renewable Energy Resources", "Renewable Energy Sources", "Nuclear Energy", and "The Wise Use of Energy".

3. Slides, Filmstrips, and 8mm Filmloops

A FUEL CALLED PROPANE (1977)

National LP-Gas Association; 1301 W. 22nd St.;
Oak Brook, IL 60521
Price: $50.00 Level: 6-12

This presentation provides a general review of how propane is produced, transported, and used in homes, on farms, and in commercial enterprises and industries. The program consists of fifty-one 35mm color slides with narration on accompanying cassette.

THE FUEL CRISIS (1974)

Prentice-Hall Media; 150 White Plains Rd.;
Tarrytown, NY 10591
Price: $50.00 Level: 10-12

This program examines the background of the fuel crisis and discusses the long-term consequences of short-term measures to alleviate the situation. Included are 2 filmstrips, 2 cassettes or records, and a program guide.

FUSION ENERGY (1973)

Visual Education Consultants; Box 52; Madison, WI 53701
Price: $5.50 Level: 7-12

Fusion is the atomic process which is the basis of the sun and the hydrogen bomb. This filmstrip explains the concept of fusion and tells what scientists are doing to achieve controlled fusion power, which promises an unlimited source of energy.

THE GREAT SAN FRANCISCO OIL SPILL

Denoyer-Geppert, Audiovisuals; 5235 Ravenswood Ave;
Chicago, IL 60640
Price: $41.00 (with cassettes) Level: 7-12
$39.00 (with records)

This program documents the collision of 2 tankers in San Francisco Bay early in 1971 and the resultant spill of 800,000 barrels of fuel oil which coated 40 miles of Pacific coastline. The set comes complete with a teacher's guide.

3. Slides, Filmstrips, and 8mm Filmloops

HARNESSING THE SUN

National Geographic Society, Educational Services; Dept. 78;
Washington, D. C. 20036
Price: $18.00 Level: 5-12

Various aspects of solar energy are covered in this 13-minute sound filmstrip. Solar collectors, mirrors, and solar cells are discussed, as are solar-heated houses and possible ways in which we may utilize solar energy in the future.

THE HISTORY OF OIL--A KEY TO AMERICA'S GROWTH (1976)

Multi-Media Productions, Inc.; P. O. Box 5097;
Stanford, CA 94305
Price: $17.95 Level: 9-12

This program traces the history of oil, examines its effects on America's industrial development, and discusses our heavy dependence on it. Included are 2 filmstrips and 1 record or cassette.

HOW DO WE USE ENERGY? (1975)

BFA Educational Media; 2211 Michigan Ave., P. O. Box 1795;
Santa Monica, CA 90406
Price: Contact source for price information. Level: K-3

This filmstrip comes with record, cassette, and script. It shows the many ways in which energy is used in today's world.

HUMAN ISSUES IN SCIENCE, UNIT 2--ENERGY: A SERIES (1975)

Scholastic Book Services; 904 Sylvan Ave.;
Englewood Cliffs, NJ 07632
Price: Contact source for price information. Level: 7-12

This series of filmstrips examines some of the ethical issues and consequences of man's development of energy resources. Included in the series are: "Energy and the Land", "Energy and the Sea", "The Future of Energy", and "Using Energy".

3. Slides, Filmstrips, and 8mm Filmloops

LEARNING ABOUT CONSERVATION--OUR MINERALS AND ENERGY RESOURCES (1968)

Coronet Instructional Films; 65 E. South Water St.;
Chicago, IL 60601
Price: Contact source for price information. Level: 4-12

This filmstrip points out the importance of mineral and energy resources and examines the problems associated with their use and conservation. The captioned filmstrip comes with record and cassette.

MAN, ALASKA, AND ENERGY (A Series, 1972)

Alyeska Pipeline Service Co.; 1815 S. Bragaw St.;
Anchorage, AK 99504
Price: Contact source for price information. Level: 7-12

This series of filmstrips presents the benefits of the Alaskan pipeline from the viewpoint of its builders. Titles included in the series are: "The Best Distance", "Can Man and Nature Make It?", "Enter Man", "A Place Called Alaska", and "Some Questions About Energy".

THE MIDDLE EAST: NATURAL RESOURCES

Educational Enrichment Materials; 110 S. Bedford Rd.;
Mt. Kisco, NY 10549
Price: $20.00 Level: 4-8

This color/sound filmstrip reports on the effects of a shortage of water and an abundance of oil in the Middle East. It covers the early exploitation of oil reserves by foreign companies and the subsequent formation of the Organization of Petroleum Exporting Countries (OPEC).

MORE DOMESTIC OIL FOR TOMORROW

Continental Oil Company, Public Relations Department;
P. O. Box 2197; Houston, TX 77001
Price: free loan Level: 10-12

The 10 slides in this set illustrate the facts and figures behind our energy problems. Possible solutions are described.

3. Slides, Filmstrips, and 8mm Filmloops

NUCLEAR ENERGY (A Series, 1978)

Educational Activities, Inc.; 1937 Grand Ave.;
Baldwin, NY 11510
Price: $79.00 Level: 10-12

This series of 5 filmstrips with cassettes and teacher's guide examines the pros and cons of nuclear power. Important factual information is illustrated with on-site photography of nuclear plants and reactors and with graphics explaining atomic theory.

NULEAR POWER INSIDE AND OUT (1974)

Atomic Industrial Forum, Inc.; 7101 Wisconsin Ave.;
Washington, D. C. 20014
Price: $60.00 Level: 9-12

This set of 20 color slides explains how nuclear power works, describes the fission process, and details the workings of the major reactor types. Included are schematic diagrams, photos of representative power plants, maps illustrating the status of nuclear power in the U.S., and a text which can be incorporated into an existing classroom unit or form a complete unit in itself.

NUCLEAR POWER: IS IT SAFE?

Educational Enrichment Materials; 357 Adams St.;
Bedford Hills, NY 10507
Price: $14.00 Level: 7-12

This black and white filmstrip, with cassette or record, looks at questions such as whether the nuclear generating plant will be the best answer to America's energy needs or will cause more problems than it solves. It also explores long-range alternatives to nuclear power.

3. Slides, Filmstrips, and 8mm Filmloops

THE OCEANS: A KEY TO OUR FUTURE (A Series)

United Learning; 6633 W. Howard St.; Niles, IL 60648
Price: $82.00 Level: 8-12

This 5-filmstrip series, with cassettes and a teacher's guide, introduces the oceans as a storehouse of the raw materials needed to meet growing population demands on land resources. New technologies required to "mine" the oceans are explored.

OFFSHORE OIL RIG

Donars Productions; P. O. Box 24; Loveland, CO 80537
Price: $7.00 Level: 5-8

These slides picture a semi-submersible drilling platform offshore in the North Atlantic. Included are 10 slides and printed notes produced by the National Film Board of Canada.

OIL FROM THE EARTH

Continental Oil Company, Public Relations Department;
P. O. Box 2197; Houston, TX 77001
Price: free loan Level: 7-12

This set contains 79 color slides which show how oil and gas were created. Also emphasized are the methods we use to find and recover them from the earth's crust.

OIL: GLOBAL WEAPON

Educational Enrichment Materials; 110 S. Bedford Rd.;
Mt. Kisco, NY 10549
Price: $14.00 Level: 7-12

The struggle for oil is profoundly affecting the complexion of world economics and politics. This black-and-white filmstrip shows how this occurs and where it may lead.

3. Slides, Filmstrips, and 8mm Filmloops

OUR DIMINISHING NATURAL RESOURCES

Educational Enrichment Materials; 110 S. Bedford Rd.;
Mt. Kisco, NY 10549
Price: $20.00 Level: 4-8

No nation on earth compares with the U. S. in the consumption of natural resources, and many of the resources necessary to support our highly-technological society are now in short supply. This filmstrip reviews some of the steps which have led to this situation and explains some measures being taken to halt the process.

THE PEACEFUL ATOM

Visual Education Consultants; Box 52; Madison, WI 53701
Price: $5.50 Level: 4-12

The filmstrip describes some of the latest uses of atomic energy. Included is an explanation of how nuclear energy can be used to generate electricity.

POLLUTION AND ENERGY (From The Series CHOOSING OUR NATION'S GOALS, 1977)

Society for Visual Education, Inc.; 1345 Diversey Parkway;
Chicago, IL 60614
Price: $19.50 (entire set) Level: 4-6

This filmstrip discusses the need for energy resources and the effects of their by-products in terms of water, air, and noise pollution. The full-color strip has illustrations, background music, and professional narration.

POWER AND ENERGY

Educational Activities, Inc.; 1937 Grand Ave.;
Baldwin, NY 11510
Price: $33.00 Level: 4-6

This set consists of 2 filmstrips, 2 audiocassettes or records, and a teacher's guide. It provides a basic study of the production of electrical energy and illustrates how fundamental laws of science are put to practical use.

3. Slides, Filmstrips, and 8mm Filmloops

THE POWER AND ENERGY CRISIS: TECHNOLOGICAL CHALLENGE OF THE FUTURE (1972)

Prentice-Hall Media; 150 White Plains Rd.;
Tarrytown, NY 10591
Price: $52.00 Level: 10-12

In this set, which contains 2 filmstrips, 2 cassettes or records, and 1 program guide, energy and electrical power generation are explained and a comparison is made of present and future energy needs. The environmental effects of energy development are explored, and the pros and cons of nuclear power are examined in depth.

THE POWER DRAIN (From The Series SURVIVING THE ECOLOGY CRISIS, 1971)

Society for Visual Education, Inc.; 1345 Diversey Parkway;
Chicago, IL 60614
Price: $18.50 Level: 4-8

This full-color filmstrip, with record or cassette and guide, examines the dilemma of increasing energy needs in the face of diminishing resources. Photography, descriptive charts and diagrams, contemporary music, and professional narration are used to present energy conservation and changes in lifestyle which may be implied by the energy crisis.

POWER FROM HYDRO-ELECTRICITY

Creative Learning; P. O. Box 324; Warren, RI 02885
Price: $5.75 Level: 4-8

This color filmstrip explains how water is collected and employed in the operation of turbines to generate electric power. The captioned filmstrip has 22 frames.

3. Slides, Filmstrips, and 8mm Filmloops

PUTTING THE SUN TO WORK (1977)

Educational Activities, Inc.; P. O. Box 392;
Freeport, NY 11520
Price: $33.00 Level: 4-12

This filmstrip, which is accompanied by records or cassettes, explores the different systems which can be used in a home to collect and convert solar energy into heat and to disperse it to the rooms of the house. How a solar power plant can convert sunlight into electricity is explained along with other uses for solar energy.

A QUESTION OF POWER (1974)

Jacoby/Storm Productions; 101 E. State St.;
Westport, CT 06880
Price: Contact source for price information. Level: 10-12

This filmstrip, with audiotape, describes the functions of a presidential panel of advisers on energy conservation. The panel is observed as it listens to the viewpoints of congressmen, representatives of the energy industry, scientists, and environmentalists.

RICHES FROM THE SEA (1975)

National Geographic Society; 17th and M Streets, N. W.;
Washington, D. C. 20036
Price: Contact source for price information. Level: 4-12

This filmstrip shows how the world's oceans provide food for an expanding population, contribute to energy needs through offshore petroleum reserves, and benefit industry through mineral deposits on the ocean floor. The filmstrip comes with cassette, record, and script.

3. Slides, Filmstrips, and 8mm Filmloops

SAUDI ARABIA: CUSTODIAN OF TRADITION AND OIL (1976)

Society for Visual Education, Inc.; 1345 Diversey Parkway;
Chicago, IL 60614
Price: $19.50 Level: 7-9

This filmstrip examines the sweeping changes taking place in Saudi Arabia as they affect individuals and traditions. Included is a teacher's guide and record or cassette.

SAUDI ARABIA: PETRO POWER (1976)

Society for Visual Education, Inc.; 1345 Diversey Parkway;
Chicago, IL 60614
Price: $19.50 Level: 7-9

In this filmstrip, students learn what oil is doing for the people of Saudi Arabia and how Saudi Arabia's petro power is affecting the rest of the world. A teacher's guide and record or cassette are included.

SCIENCE AND HUMAN VALUES (1978)

Educational Materials and Equipment Co.; 46 Lafayette Ave.;
New Rochelle, NY 10801
Price: $49.00 Level: 7-12

This set of 2 sound filmstrips focuses on the solid waste disposal problem. The emphasis is on new technologies that extract energy and useable resources from garbage.

THE SEARCH FOR POWER AND ENERGY (1973)

Walt Disney Educational Media Co.; 800 Sonora Ave.;
Glendale, CA 91301
Price: Contact source for price information. Level: 1-6

This captioned filmstrip, which comes with a script, uses cartoons to trace man's continuing search for sources of inexpensive, abundant, efficient energy. It concludes with a depiction of man's present dilemma in attempting to protect the environment while developing alternate power potentials.

3. Slides, Filmstrips, and 8mm Filmloops

SOLAR ENERGY

Educational Activities, Inc.; 1937 Grand Ave.;
Baldwin, NY 11510
Price: $27.00 (with records) Level: 4-6
$29.00 (with cassettes)

These filmstrips show the possible uses of solar energy to provide heat and power. The set includes 2 filmstrips, 2 records or cassettes, and a teacher's guide.

SOLAR ENERGY IN IOWA (1978)

Citizens United for Responsible Energy; 1342 30th St.;
Des Moines, IA 50311
Price: Contact source for price information. Level: 4-12

This program focuses on current solar projects underway in Iowa, with an explanation of the general principles of solar technology. A script or tape is included.

THE SOLAR QUEST

The Polished Apple; 3742 Seahorn Dr.; Malibu, CA 90265
Price: $31.75 Level: 10-12

This 11-minute filmstrip looks at the history of solar use around the world and documents ways in which solar power can be tapped for practical use in the home. The filmstrip proposes that the current interest and expertise in solar power can provide a partial solution to the energy problem.

SOURCES OF ENERGY (A Series)

Denoyer-Geppert; 5235 Ravenswood Ave.; Chicago, IL 60640
Price: $7.50 (each filmstrip) Level: 10-12
$13.50 (2-part set)

This set of filmstrips deals with future alternative sources of energy. Included in the set are: "Harnessing Solar Energy", which deals with the sun as a perpetual energy source and documents attempts to harness that energy; and "Power Sources of the Future", which examines fuel cells, silver cells, and various generators as sources of power for the future.

3. Slides, Filmstrips, and 8mm Filmloops

THE SUN: AN OLD SOLUTION TO A NEW PROBLEM (1977)

Educational Activities, Inc.; P. O. Box 392;
Freeport, NY 11520
Price: $33.00 Level: 4-12

This filmstrip, which comes with records or cassettes, explains the limited availability, expense, and dangers of fossil and nuclear fuels. A short history of solar energy is used to introduce modern devices which have been invented to apply solar energy to today's needs.

SUN/EARTH SLIDE PRESENTATION (1976)

KaiDib Films, International; P. O. Box 261;
Glendale, CA 91209
Price: Contact source for price information. Level: 10-12

This set contains over 150 color slides and a copy of the book Sun/Earth by Richard Crowther. The interaction of natural forces--sun, wind, earth, water--is dealt with in practical and fundamental terms.

THE SUN: ENERGY FROM A STAR (1976)

Society for Visual Education, Inc.; 1345 Diversey Parkway;
Chicago, IL 60614
Price: $18.50 Level: 7-9

In this color filmstrip the sun is portrayed as the most important star in the universe from the human perspective: it serves as a source of energy, sustainer of life, and the basic determinant of climate. Included is a teacher's guide and record or cassette.

TECHNOLOGICAL RESOURCES (1974)

Educational Design, Inc.; 451 S. Jefferson; Orange, NJ 07050
Price: $34.50 Level: 7-12

This filmstrip with cassette surveys hydroelectric power, fossil fuels and mining, and possible future sources of energy. It also compares technological and nontechnological cultures and raises some important questions concerning the values of our generation.

3. Slides, Filmstrips, and 8mm Filmloops

UNDERGROUND COAL MINING

Donars Productions; P. O. Box 24; Loveland, CO 80537
Price: $7.00 Level: 5-8

This slide presentation depicts the process and equipment used in underground coal mining. It contains 10 slides with printed notes.

USING ATOMIC ENERGY FOR ELECTRIC POWER

Denoyer-Geppert Co.; 5235 Ravenswood Ave.;
Chicago, IL 60640
Price: $7.50 Level: 10-12

In this filmstrip, conventional methods of burning fuel are contrasted with heat produced by an atomic reaction. Various means of harnessing a fission reaction are shown, along with industrial applications of atomic power.

WEALTH FROM MOTHER EARTH

Denoyer-Geppert Co.; 5235 Ravenswood Ave.;
Chicago, IL 60640
Price: $7.50 Level: 10-12

In this filmstrip, natural resources and their effects on man's life are shown in contemporary and historical contexts. Origins of fossil fuels and other power sources are discussed.

WHAT IS ENERGY? (1976)

Visual Education Consultants; Box 52; Madison, WI 53701
Price: $7.50 Level: K-6

From sunlight to electricity, this color filmstrip defines energy and shows the many forms energy can take. Students see how the energy of sunlight can be transformed into motion.

3. Slides, Filmstrips, and 8mm Filmloops

WHAT THE SUN MEANS TO THE EARTH--LIGHT ENERGY (1968)

Sterling Educational Films; 241 E. 34th St.;
New York, NY 10016
Price: Contact source for price information. Level: 1-6

This silent filmloop shows the sun's radiation and how its light energy compares to electrical energy. The film demonstrates the harnessing of the power of waterfalls to produce electricity and the many uses for this energy.

WHERE DO WE GET ENERGY? (1975)

BFA Educational Media; 2211 Michigan Ave., P. O. Box 1795;
Santa Monica, CA 90406
Price: Contact source for price information. Level: K-3

This filmstrip, which comes with record, cassette, and script, investigates sources of energy. It shows how the sun has provided most of the energy found on earth through its role in the formation of oil, gas, and coal; wind energy is also discussed.

WHY NUCLEAR ENERGY--A SLIDE TALK WITH A MORAL (1977)

Atomic Industrial Forum, Inc.; 7101 Wisconsin Ave.;
Washington, D. C. 20014
Price: $75.00 Level: 7-12

Complete with script and 135 color slides, this package explains the importance of energy to our economy and demonstrates how nuclear technology is helping to meet our energy requirements. The presentation, which runs 15 minutes, is developed around ancient and modern-day fables and contains many cartoon-type illustrations.

3. Slides, Filmstrips, and 8mm Filmloops

WHY THE ENERGY CRISIS?

Educational Enrichment Materials; 110 S. Bedford Rd.;
Mt. Kisco, NY 10549
Price: $20.00 Level: 4-8

This color/sound filmstrip discusses the importance of oil as an energy source and raw material in the manufacturing of many products. Because of our dependence on this resource, for which we have developed no substitutes, oil-producing nations are emerging with new wealth and power.

YOU AND ENERGY (1977)

Barr Films; P. O. Box 5667, 3490 E. Foothill Blvd.;
Pasadena, CA 91107
Price: $24.00 Level: 7-9

The world depends on energy but we're fast running out of it. This 77-frame filmstrip, with cassette and teacher's guide, is designed to generate interest in such energy alternatives as wind, solar, geothermal, and nuclear power.

B. Activity Packages

1. Models, Tools, and Devices

COLUMBIA CHASE REDI-MOUNT SOLAR COLLECTOR (Model Number 2030)

Energy Learning Systems, Inc.; 390 Linebrook Road;
Ipswich, MA 01938
Price: $160.00 unassembled Level: 7-12
$175.00 assembled

This 2' x 3' solar collector is best suited for solar system design projects. It uses a copper absorber plate and tubing, single glazed, fiberglas-reinforced plastic, fiberglas insulation, and urethane foam in side rails.

COLUMBIA CHASE SOLAR-LAB (1978)

Columbia Chase Solar Energy Division; 55 High Street;
Holbrook, MA 02343
Price: $2,995.00 Level: 4-12

The Solar-Lab is a fully-portable solar hot water system. A wide variety of procedures to test the performance of solar energy collection equipment can be done with this unit, which comes with a workbook of experiments.

DEMONSTRATION SOLAR HOT WATER SYSTEM (1978)

E & K Service Co.; 16824 74th Ave., N. E.;
Bothell, WA 98011
Price: $1,150.00 Level: 10-12

This unit is a complete solar system for experimental or demonstration purposes. It includes miniature solar panels, pump, valves, and two 20-gallon storage tanks.

1. Models, Tools, and Devices

DO-IT-YOURSELF COLLECTOR KIT (Model Number SL-35)

Energy Learning Systems, Inc.; 390 Linebrook Road;
Ipswich, MA 01938
Price: $69.95 Level: 7-12

This kit contains all the components necessary to build a working liquid flat plate solar collector. The kit is complete with instructions and diagrams, and the finished collector will heat 2 to 3 gallons of water each day.

ED-U-SOL I, ED-U-SOL II

Systems Using Nature, Ltd.; P. O. Box 230;
Ballston Lake, NY 12019
Price: $1,695.00 - Ed-U-Sol I Level: 10-12
$2,995.00 - Ed-U-Sol II

These devices are designed to provide the student with a complete working knowledge of solar energy by including a solar energy collector, tank-pump unit, fully-instrumented control panel, text and operating manual, and, in the Ed-U-Sol II, chart records, solar meter, and much more. Schools interested in the purchase of this equipment should contact the source for complete details.

THE HEAT SLEUTH (Model Number ELS-401)

Energy Learning Systems, Inc.; 390 Linebrook Road;
Ipswich, MA 01938
Price: $54.95 Level: 4-12

This device, a differential electronic thermometer, can be used to measure heat leaks in the classroom, thus giving students a "hands-on" experience in the process of evaluating energy conservation efforts. A teacher's guide with suggested projects is included.

1. Models, Tools, and Devices

INSOLATION METER KIT (Model Number SL-8)

Energy Learning Systems, Inc.; 390 Linebrook Road;
Ipswich, MA 01938
Price: $59.95 Level: 4-12

This solid-state meter is designed to measure available solar energy, with recorder outputs for making permanent insolation records. The student manual provides 8 experiments and related activities.

MINIATURE SOLAR PANEL (1978)

E & K Service Co.; 16824 74th Avenue, N. E.;
Bothell, WA 98001
Price: $54.50 Level: 10-12

This functional solar panel (two square feet) can be used in the classroom for demonstration and experimental purposes. All parts and instructions are included.

THE ONE-BLADED TURBINE STUDENT WINDMILL (1978)

Zephyr Wind Dynamo Co.; P. O. Box 241;
Brunswick, ME 04011
Price: Windmill - $675.00 (complete) Level: 7-12
Manual - $25.00 (first copy)
$ 5.00 (each additional copy)

This device offers an opportunity for students to gain direct experience with a wind energy conversion system that is sized for easy manipulation of components. The windmill is suited to a wide variety of applications--from battery charging to heating to running an electric motor.

1. Models, Tools, and Devices

PHOTOVOLTAIC DEMONSTRATION KIT

Solarex Corporation; 1335 Piccard Drive;
Rockville, MD 20850
Price: Contact source for price information. Level: 10-12

This complete photovoltaic demonstration kit for converting sunlight into electricity contains 19 component parts that can be interconnected to make hundreds of different circuits (series or parallel), meters to measure current and voltage, and a detailed 8-page instruction booklet. Energized by sunlight or incandescent light, the modules provide all the circuitry needed to produce power and operate a motor or buzzer.

PORTABLE SOLAR METER (1976)

Dodge Products, Inc.; P. O. Box 19781;
Houston, TX 77024
Price: $49.50 for meter Level: 7-12
$ 6.50 for protective case

Science instructors can use this meter to demonstrate the intensity of solar radiation and to familiarize students with the units of measurement employed in this context. It can also be used to determine accumulated amounts of solar energy.

THE SOLAR CUBE (1978)

Solarex Corporation; 1335 Piccard Drive;
Rockville, MD 20850
Price: Contact source for price information. Level: 7-12

The Solar Cube, made of clear plastic and measuring about 4 inches on each side, contains a motor-driven propeller whose speed depends on the intensity of light hitting the solar cell. It provides a graphic demonstration of the practical application of solar energy.

1. Models, Tools, and Devices

SOLAR DIODE MODEL

Energy Learning Systems, Inc.; 390 Linebrook Road;
Ipswich, MA 01938
Price: $49.50 Level: 7-12

This is a working model of the thermic diode solar panel, developed by Professor Shawn Buckley of M. I. T., which allows heat from the sun to pass through the panel to be stored but does not allow heat to flow out when the sun is not shining. Easily portable (actual size 12" x 8" x 4"), this model comes with complete assembly and operating instructions.

THE SOLARETTE

Energy Learning Systems, Inc.; 390 Linebrook Road;
Ipswich, MA 01938
Price: $149.00 Level: 7-12

The Solarette is a self-contained solar hot water system consisting of a flat-plate collector and heat storage tank, which utilizes the principle of thermosiphoning. Instructions and suggested experiments are included. (Note: The Solarette Collector may be ordered separately for $65.00.)

SOLAR COLLECTOR KIT (Model Number SL-2A)

Energy Learning Systems, Inc.; 390 Linebrook Road;
Ipswich, MA 01938
Price: $59.95 Level: 4-12

This kit contains a flat plate solar collector and all materials needed to measure flat plate operation, including a portable light source. There is also an Experiment Manual with student activities and a Teacher's Manual which describes experiment results, gives references, and suggests class demonstrations.

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1. Models, Tools, and Devices

SOLAR ENERGY LABORATORY (1974)

Educational Materials and Equipment Co.; 46 Lafayette Ave.;
New Rochelle, NY 10801
Price: $164.50 Level: 7-12

This set includes 4 individual lab kits: 1) Solar Light to Electricity; 2) Solar Heat to Electricity; 3) Solar Water Heater Model; 4) Solar Heat Collector. A sun-substitute lamp and comprehensive study guide are also included.

SUNPUMP SOLAR DEMONSTRATION UNIT (Model Number SDU-200)

Entropy Limited; 5735 Arapahoe; Boulder, CO 80303
Price: $792.00 Level: 7-12

The Solar Demonstration Unit, which comes with suggested activities, is a self-contained assembly for practical demonstrations of the principles of solar energy and other experiments in the physical sciences. The instructor is provided with an opportunity to demonstrate the application of theoretical knowledge and technical skills to the solution of contemporary, practical problems.

THERMAL INSULATION KIT (Model Number SL-7)

Energy Learning Systems, Inc.; 390 Linebrook Road;
Ipswich, MA 01938
Price: $19.95 Level: 4-12

With this kit, thermal properties of various commercial insulation materials can be compared, using a simulated solar energy storage tank for heat loss measurements. A student manual includes experiments on solar energy storage as well as home insulation efficiency.

2. Games

ARAB OIL POLITICS (1979)

Designers: Mary Webb, David Chesebrough, Emmanual Sillman,
teachers from Energy Workshops
Conservation Consultants; 417 Thorne St.;
Sewickley, PA 15143
Price: $1.00 Level: 10-12

This is a simulation designed to involve students in the political issues that surround the production and sale of oil from the Middle East. Complete instructions are provided.

BRITE LITE POWER COMPANY VS. PEOPLE AND THEIR ENVIRONMENT (1979)

Designers: Mary Webb, David Chesebrough, Emmanual Sillman,
teachers from Energy Workshops
Conservation Consultants; 417 Thorne St.;
Sewickley, PA 15143
Price: $1.00 Level: 7-12

This is a classroom simulation of a trial involving the environmental risks of the use of coal and nuclear energy to generate electric power. Transparency masters are included.

END GAME--ENERGY DECISIONS GAME (1977)

Designers: Arthur Dunlap, Carol Madsen,
Yale and Nancy Schiffman
Associates for Community Resources; 1 Farm Lane;
Sudbury, MA 01776
Price: Contact source for price information. Level: 10-12

"End Game" is a gaming simulation involving role-playing, which illustrates energy conservation options for public officials and municipal department heads. Work sheets are included, and the game requires approximately 3 hours to complete.

2. Games

ENERGY

Imperial International Learning; P. O. Box 548;
Kankakee, IL 60901
Price: $7.95 Level: 4-6

This board game teaches energy concepts, including conservation, abuse, release, and conversion. The game uses terms such as "kilocalories" and "kinetic energy" and is recommended for superior students.

ENERGY DEMAND MANAGEMENT (1978)

Designer: Carol Madsen
Associates for Community Resources; 1 Farm Lane;
Sudbury, MA 01776
Price: Contact source for price information. Level: 10-12

Designed as a scenario for a small group activity, "Energy Demand Management" simulates the development of an energy management proposal. Two community profiles are included, and the activity requires about 3 hours.

ENERGY GAMES

Educational Teaching Aids; 159 W. Kinzie Street;
Chicago, IL 60610
Price: $23.00 Level: 1-6

By playing these games, children learn that nothing works without a source of energy and that, because energy sources are limited, new ways of conserving valuable resources must be explored. Games in the set include "Discovering Energy", "Energy In the Community", "Mass Transit", and "Put Out the Lights".

2. Games

ENERGY RESOURCE DEVELOPMENT (1978)

Designer: Bruce Edelston
Associates for Community Resources; 1 Farm Lane;
Sudbury, MA 01776
Price: Contact source for price information. Level: 11-12

This small-group simulation, which includes role-playing for different interest groups, deals with power plant siting issues and alternative energy trade-offs. To be effective, the activity needs a technical advisor, such as a local utility representative.

NO DAM ACTION

Systems Factors, Inc.; P. O. Box 6548, Station - 710 Arcade;
St. Paul, MN 55106
Price: $145.00 Level: 10-12

"No Dam Action", an ecology simulation, looks at present-day environmental concerns: flood control, nuclear-fueled plants, sanitation and water use, long-term water resource management, and lake classification. Energy concerns are treated as they relate to other issues, such as environmental awareness and ecology resource planning.

POLLUTION: NEGOTIATING A CLEAN ENVIRONMENT (1970)

Simulation Systems; P. O. Box 46;
Black Butte Ranch, OR 97759
Price: $27.00 Level: 9-12

In this simulation, students assume the roles of industrialists, government representatives, citizens, and conservationists, and must weigh personal or corporate goals against the need for environmental protection, with effective persuasion an important factor in the decision-making process. Although pollution-specific, many of the issues are energy related, and the game format is easily adapted to energy issues.

3. Learning Kits

CAREERS IN ENERGY (1977)

Pathescope Educational Media, Inc.; 71 Weyman Avenue;
New Rochelle, NY 10802
Price: $50.00 Level: 7-12

This kit, which contains 2 filmstrips, 2 cassettes, and a teacher's manual, discusses the various jobs available to men and women in the field of energy. The program uses interviews to determine necessary training, job satisfaction, and opportunities.

CONSERVATION OF OUR ENVIRONMENT (1975)

Coronet Multimedia; 65 E. South Water St.;
Chicago, IL 60601
Price: $165.00 Level: 4-9

This multimedia kit, which examines energy and environmental problems as interrelated issues, contains 6 captioned filmstrips, 6 filmstrips with cassettes, 10 color study prints, a toss game called "Survival", and a comprehensive program guide. Contact source regarding separate purchase of individual parts of the kit.

ENERGY AWARENESS

Photo Motion Corp.; Morrison Building;
King of Prussia, PA 19406
Price: $129.95 Level: 4-8

Emphasizing the urgent need for energy conservation, this program investigates traditional power generation methods such as the water wheel and the windmill and future energy sources such as nuclear, solar, and geothermal energy. The program includes 20 animated overhead transparencies, 17 student worksheets, puzzles, diagrams, matching and identification activities, and an energy booklet of conservation projects to assemble.

3. Learning Kits

ENERGY CONSERVATION PROGRAM KIT

United States Jaycees; Box 7; Tulsa, OK 74102
Price: Contact source for price information. Level: 9-12

This kit has been developed to help educate the public about the energy problem and to show ways to save energy and money. It includes color slides, a script, and printed materials.

THE ENERGY CRISIS

Educational Design, Inc.; 47 West 13th Street;
New York, NY 10011
Price: $99.00 Level: 7-12

This program, which includes 160 slides in 2 carousels, 2 LP records, 2 cassette tapes, and a teacher's guide, explains fuel energy--where it comes from, how we use it, why we are running dangerously low. The viewpoints of industrialists, scientists, ecologists, and diplomats regarding proposed solutions to one of America's most pressing problems are presented.

ENERGY: MAKING THINGS GO (1975)

Pathescope Educational Media, Inc.; 71 Weyman Avenue;
New Rochelle, NY 10802
Price: $28.00 Level: 4-8

This kit, which contains a filmstrip, cassette, teacher's manual, and 6 spirit masters, defines energy and its uses. It uses an open-ended approach so students can broadly discuss and debate the energy situation.

ENERGY RESOURCES (1978)

Author: Robert E. Boyer
Ward's Natural Science Establishment, Inc.; P. O. Box 1712;
Rochester, NY 14603
Price: $18.50 Level: 10-12

This kit contains 12 specimens of various kinds of fossil fuels. It includes a teacher's guide with introduction and answers to questions, spirit masters for 4 activities, and questions.

3. Learning Kits

FOOD AND ENERGY (1978)

Edison Electric Institute, Educational Services;
90 Park Avenue; New York, NY 10016
Price: $20.00 Level: 4-6

This multimedia kit explains the relationship of energy supply to food production in the U. S. and other regions of the world. Included are 2 filmstrips, 2 cassettes, 6 student activity guides, a teacher's guide, and a wall poster.

POWER: SHORTAGE AND POLLUTION (1975)

Pathescope Educational Media, Inc.; 71 Weyman Avenue;
New Rochelle, NY 10802
Price: $28.00 Level: 4-8

This kit, which contains a filmstrip, cassette, teacher's manual, and 6 spirit masters, discusses power shortages, pollution, and the search for new sources of energy. The kit uses an open-ended approach so the students can discuss and debate the entire power situation.

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C. Printed Material

1. Background Reading Material

THE ACCIDENT HAZARDS OF NUCLEAR POWER PLANTS (1976)

Author: Richard E. Webb
University of Massachusetts Press; Amherst, MA 01002
Price: $6.95 Level: Teacher

Richard Webb, a nuclear engineer, raises questions about the safety of nuclear power. He describes 14 different accidents or "near-accidents" and their consequences.

THE ALASKA PIPELINE: THE POLITICS OF OIL AND NATIVE LAND CLAIMS (1975)

Author: Mary Clay Berry
Indiana University Press; Tenth and Morton Streets;
Bloomington, IN 61701
Price: $10.95 Level: Teacher

This book provides an historical review of the political and legal developments leading up to the building of the Alaska oil pipeline. The author argues for consideration of environmental and native concerns.

ALTERNATIVE ENERGY STRATEGIES (1976)

Author: John Hagel, III
Praeger Special Studies; 383 Madison Avenue;
New York, NY 10017
Price: $19.50 Level: Teacher

This book provides a study of alternative energy programs designed to meet the needs of the world's principal energy consuming nations. It explores alternatives to petroleum and analyzes policy options in terms of technological, economic, political, and environmental considerations.

1. Background Reading Material

THE AMERICAN ENERGY CONSUMER (1975)

Authors: Dorothy K. Newman and Dawn Day
Ballinger Publishing Co.; 17 Dunster St.;
Cambridge, MA 02138
Price: $7.95 Level: Teacher

A seemingly endless supply of cheap energy, coupled with the products of a diverse and rapidly-expanding technology, has led to a virtual explosion of U. S. energy consumption rates during the 20th century. This study offers a broad view of energy lifestyles in America and shows the correlations that exist between levels of energy usage and the socioeconomic characteristics of individual households.

AMERICANS AND OIL IN THE MIDDLE EAST (1962)

Author: Charles W. Hamilton
Gulf Publishing Co., Book Division; P. O. Box 2608;
Houston, TX 77001
Price: $8.95 Level: 10-12

This book documents the background of American and British oil interests in the Middle East and the events leading to the current oil crisis. Historical events are covered, from the dark ages to the present-day influence of western powers in energy markets.

AMERICA'S OIL FAMINE: HOW IT HAPPENED AND WHEN IT WILL END (1975)

Author: Ruth Sheldon Knowles
School and Library Dept., G. P. Putnam's Sons; Coward, McCann, and Geoghegan, Inc.; Berkley Publishing Corp.;
P. O. Box P70; East Rutherford, NJ 07073
Price: $5.96 Level: 7-12

This book views the energy crisis within its international framework. It centers on long-standing U. S. assumptions regarding oil supply, dependency on foreign oil, distrust of oil companies, and environmentalists' objections to further refinery construction.

1. Background Reading Material

APPROPRIATE TECHNOLOGY

Author: Colin Norman
Worldwatch Institute; 1776 Massachusetts Ave., N. W.;
Washington, D. C. 20036
Price: $2.00 Level: 10-12

The author considers the criteria that should be applied in choosing technology for industrialized and developing nations--energy efficiency, environmental impact, social equity, use of human and capital resources. This publication may be useful in a study of energy/environment issues.

ARAB OIL: IMPACT ON ARAB COUNTRIES AND GLOBAL IMPLICATIONS (1976)

Editors: Naiem A. Sherbiny and Mark A. Tessler
Praeger Special Studies; 383 Madison Ave.;
New York, NY 10017
Price: $24.50 Level: Teacher

This book explores the impact of Arab oil on the Middle East and on the industrial world in general. Topics covered include the industrialization of Arab countries, production and pricing of oil, world energy needs, and power relationships.

ARCHITECTURE AND ENERGY (1978)

Author: Richard G. Stein
Doubleday and Co., Inc.; 501 Franklin Ave.;
Garden City, NY 11530
Price: $6.95 Level: Teacher

This book provides a link between the energy shortage and innovative, energy-saving architecture. The author's energy efficient designs have become famous.

1. Background Reading Material

ATOMIC ENERGY (1971)

Author: Donald Barr
Grosset and Dunlap, Inc., Publishers; 51 Madison Avenue;
New York, NY 10010
Price: $3.19 Level: 4-6

This book provides a brief history of the development of atomic energy. The author emphasizes atomic energy's significance in today's world and the future uses of this formidable force.

ATOMIC ENERGY AND THE SAFETY CONTROVERSY (1978)

Facts on File, Inc.; 119 W. 57th St.;
New York, NY 10019
Price: $13.95 Level: 10-12

This book examines the domestic and international controversy over health and accident hazards involved in both peaceful and military uses of nuclear energy. Events and statistics of the last 10 years are presented.

THE BEST PRESENT OF ALL (1974)

Author: Oliver A. Houck
National Wildlife Federation, Department EEM;
1412 16th St., N. W.; Washington, D. C. 20036
Price: free Level: 1-6

This illustrated booklet, written in story form, discusses energy sources. The emphasis is on the importance of solar and geothermal energy.

BLACK CONTRIBUTORS TO SCIENCE AND ENERGY TECHNOLOGY (1979)

U. S. Department of Energy, Office of Public Affairs;
Washington, D. C. 20585
Price: free Level: 4-12

Many black scientists have contributed greatly to the search for new energy resources and to the more efficient, productive use of present resources. This booklet offers a brief look at the careers of 24 of these scientists.

1. Background Reading Material

BLACK SUNSHINE: THE STORY OF COAL (1977)

Author: Olive W. Burt
Julian Messner Division, Simon and Schuster;
1230 Avenue of the Americas; New York, NY 10020
Price: $6.64 Level: 4-6

Black Sunshine is a topical study of how coal was formed, how it was mined in the past and how it is mined today. It is also the story of the people who, as miners, perform some of the most dangerous jobs in the world.

A BOOK ABOUT ELECTRICITY (1978)

Authors: Harlan Wade and Denis Wrigley
Raintree Children's Books; 205 West Highland Avenue;
Milwaukee, WI 53203
Price: $4.49 Level: K-3

This book is designed to bring difficult concepts about electricity within reach of very young readers. Color illustrations reinforce the text.

A BOOK ABOUT OIL (1978)

Authors: Harlan Wade and Denis Wrigley
Raintree Children's Books; 205 West Highland Avenue;
Milwaukee, WI 53203
Price: $4.49 Level: K-3

This book, written especially for the young reader, is a simplified approach to complicated principles of oil formation and use. Many color illustrations are included.

CAREERS IN THE ENERGY INDUSTRY (1977)

Author: Betsy Harvey Kraft
Franklin Watts, Inc.; 730 Fifth Avenue;
New York, NY 10019
Price: $4.90 Level: 7-12

This book outlines a full range of jobs in the field of fossil fuels, nuclear energy, and electricity, as well as energy-related careers in government and education. It is illustrated with photographs and contains a bibliography and an index.

1. Background Reading Material

CATCH THE WIND: A BOOK OF WINDMILLS AND WINDPOWER (1976)

Author: Dennis Landt
Four Winds Press; 50 West 44th Street;
New York, NY 10036
Price: $7.95 Level: 5-12

This book looks at how wind was used for power in the past and the problems and possibilities of windpower use today. The book contains anecdotes about the men who have harnessed the wind throughout history, in addition to a useful index and bibliography.

COAL (1976)

Author: Betsy Harvey Kraft
Franklin Watts; 730 Fifth Avenue;
New York, NY 10019
Price: $4.90 Level: 4-6

This illustrated book covers the history of coal, how it is mined, and its many uses. Special features include new ways of using coal and mining techniques of the future.

COAL AND CRISIS (1978)

Author: Walter A. Rosenbaum
Praeger Special Studies; 383 Madison Ave.;
New York, NY 10017
Price: $15.95 Level: Teacher

Coal, an abundant source of energy, is also controversial because of the ecological concerns and political issues raised by its production and use. This book explores the often difficult choices to be made between our increasing energy consumption and the need for control and examines the dangers of a cleavage between energy-producing and energy-consuming states.

1. Background Reading Material

COAL IN THE U. S. ENERGY MARKET (1978)

Author: Richard L. Gordon
Lexington Books, D. C. Heath and Co. Distribution Center;
2700 North Richardt Avenue; Indianapolis, IN 46219
Price: Contact source for price information. Level: Teacher

This book provides an economic analysis of the U. S. coal industry. It stresses consumption, the economics of fuel choice, and regulations affecting production and use.

THE COAL INDUSTRY: WHERE TO? (1978)

Business Communications Co., Inc.; P. O. Box 2070C,
9 Viaduct Rd.; Stamford, CT 06906
Price: $35.00 Level: Teacher

This book gives an overall look at the coal industry, including history, current world reserves, methods of recovery, and uses. The focus is on what may happen within the coal industry in the near future and what these changes will mean for future coal supplies.

THE COMING AGE OF SOLAR ENERGY (1975)

Author: D. S. Halacy
Avon Books; 959 Eighth Avenue; New York, NY 10019
Price: $2.25 Level: 7-12

This book is a source of information on the applications of solar power. It outlines the theories, past uses, and future applications of solar energy in replacing rapidly-diminishing fossil fuels.

1. Background Reading Material

COMPETITION IN THE U. S. ENERGY INDUSTRY (1975)

Author: Thomas Duchesneau
Ballinger Publishing Co.; 17 Dunster St.;
Cambridge, MA 02138
Price: $10.00 Level: Teacher

This book examines the role of competition in the production of primary energy supplies. It describes the structural and institutional context of competitive energy production and performance.

THE COMPLETE SOLAR HOUSE (1977)

Author: Bruce Cassidy
Dodd, Mead and Co.; 79 Madison Ave.;
New York, NY 10016
Price: $8.95 Level: Teacher

The Complete Solar House, an introductory look at the use of solar energy in the home, describes successful solar applications in ordinary residences. Basic questions on solar systems are answered in nontechnical language.

THE CONSUMER'S ELECTRIC CAR (1977)

Author: Ernest H. Wakefield
Ann Arbor Science Publishers; P. O. Box 1425;
Ann Arbor, MI 48106
Price: $5.95 Level: 10-12

This book provides a description of electric vehicles and how they work. Historical illustrations of electric vehicles from the past are also included.

1. Background Reading Material

THE CONTROL OF OIL (1977)

Author: John M. Blair
Vintage Books, Division of Random House, Inc., Education Dept. S; 201 E. 50th St.; New York, NY 10022
Price: $3.95 Level: Teacher

This study describes how political and economic power in the oil-producing world is concentrated in the hands of seven large corporations: Exxon, Mobil, Texaco, Standard Oil of California, Gulf, British Petroleum, and Royal Dutch Shell. The point is made that these organizations form an entrenched power bloc with no sense of responsibility to the international market being served.

DEVELOPMENT OF THE IRANIAN OIL INDUSTRY (1976)

Author: Fereidun Fesharaki
Praeger Special Studies; 383 Madison Ave.;
New York, NY 10017
Price: $24.50 Level: Teacher

This book traces the development of Iran's oil industry since 1900. It covers both national and international aspects, including Iran's role in OPEC and utilization of oil wealth.

THE DYNAMICS OF ELECTRICAL ENERGY SUPPLY AND DEMAND (1975)

Author: R. K. Pachauri
Praeger Special Studies; 383 Madison Ave.;
New York, NY 10017
Price: $19.95 Level: Teacher

This book provides an analysis of the demographic, financial, and policy variables affecting supply and demand in the electrical industry. It projects supply and demand curves and trends to 1990 on the basis of potential policy changes and adjusted growth rates.

1. Background Reading Material

EARTH, WATER, WIND, AND SUN: OUR ENERGY ALTERNATIVES (1977)

Author: D. S. Halacy, Jr.
Harper and Row Publishers, Inc.; 10 E. 53rd Street;
New York, NY 10022
Price: $8.95 Level: 10-12

This book, which contains many photographs, discusses alternate energy sources. Geothermal, hydroelectric, wind, and solar power are described as alternatives to fossil fuels.

ECONOMETRIC STUDIES IN ENERGY DEMAND AND SUPPLY (1978)

Editors: G. S. Maddala, W. S. Chern, and G. S. Chill
Praeger Special Studies; 383 Madison Ave.;
New York, NY 10017
Price: $17.95 Level: Teacher

This volume of studies contributes to the econometric analysis of energy. It examines the economic problems of supply and demand for energy and concludes that price elasticities are high, and that energy policy should rely on the price mechanism.

ECONOMIC ASPECTS OF THE ENERGY CRISIS (1975)

Author: Harry W. Richardson
Lexington Books, D. C. Heath and Co. Distribution Center;
2700 North Richardt Ave.; Indianapolis, IN 46219
Price: $16.00 Level: Teacher

Focusing on the energy problems of the U. S. within the context of world developments, this book provides a theoretical, analytical, and factual base for a realistic assessment of U. S. energy policy. It may provide background material for class lectures and discussions.

1. **Background Reading Material**

ECONOMICS OF ENERGY: READINGS ON ENVIRONMENT, RESOURCES, AND MARKETS (1975)

Editor: Leslie Grayson
The Darwin Press, Inc.; Box 2202; Princeton, NJ 08540
Price: $6.95 Level: Teacher

This book offers a comprehensive review of the economic dimensions of the energy problem: supply and demand, government relations, antitrust considerations, environment, and external costs of energy use. The basic economics of each of the subindustries--oil, natural gas, coal, nuclear, and new technology sources--are discussed in detail.

THE ECONOMICS OF NUCLEAR AND COAL POWER (1976)

Author: Saunders Miller
Praeger Special Studies; 383 Madison Ave.;
New York, NY 10017
Price: $17.50 Level: Teacher

This book presents an analysis of the commercial economics of coal and nuclear energy. It discusses malfunctioning in the nuclear fuel cycle and explores the risks to investors of financing nuclear facilities.

THE ELECTRIC WAR: THE FIGHT OVER NUCLEAR POWER (1976)

Author: Sheldon Novick
Sierra Club; 530 Bush St.; San Francisco, CA 94108
Price: $12.50 Level: 10-12

This book about the nuclear power debate contains 26 black and white photos. Written in layman's language, it is designed for consumer groups, ecologists, and students of the energy problem.

1. Background Reading Material

THE ELECTRIC WISHING WELL: THE SOLUTION TO THE ENERGY CRISIS (1976)

Author: Joseph J. Di Certo
Macmillan, Inc.; 866 Third Ave.; New York, NY 10022
Price: $4.95 Level: 10-12

This book provides a discussion about energy resources and technology. Many simple drawings show how various energy systems work, including nuclear, geothermal, and solar power plants.

EMERGING ENERGY POLICY PRINCIPLES (1974); and COSMIC ECONOMICS (1974)

Authors: Emerging Energy Policy Principles - Tom Bender
Cosmic Economics - Joel Schatz and Tom Bender
Rain Publications; 2270-B N. W. Irving;
Portland, OR 97210
Price: $1.00 each Level: 10-12

These two short papers are part of Oregon's early energy research and planning efforts. They offer sound principles for wending our way through coming economic/energy transition.

ENERGY (1975)

Author: Gerald M. Crawley
Macmillan, Inc.; 866 Third Ave.; New York, NY 10022
Price: $11.95 Level: 10-12

Energy, which contains many schematics and tables, provides an introduction to energy suitable for classroom use. It uses a science-oriented approach to all phases of energy generation, transportation, and use.

1. Background Reading Material

ENERGY (1977)

Editor: Roseanne Nolan
Northwest Regional Foundation; 910 Washington;
Spokane, WA 99201
Price: $3.50 Level: 10-12

This article, originally an issue of Futures Conditional, is an attempt to bring some cohesion to the various energy problems that now confront us. Activities are included which could be of use in the classroom.

ENERGY (1963)

Author: Mitchell Wilson, et al.
Time-Life Books: 777 Duke St.; Alexandria, VA 22307
Price: $5.95 Level: 4-12

This Time-Life book provides a basic introduction to energy. Topics covered include nuclear and other alternate power sources.

ENERGY (Revised Edition)

J. Weston Walsh, Publisher; Box 658; Portland, ME 04104
Price: $3.25 Level: 7-12

This book is a short overview of energy issues. It looks at energy problems from various perspectives: past, present, and future.

ENERGY--A CRISIS--A DILEMMA--OR JUST ANOTHER PROBLEM (1977)

Author: Jesse S. Doolittle
International Scholarly Book Services; P. O. Box 555;
Forest Grove, OR 97116
Price: $12.95 Level: Teacher

This book surveys past and present uses of energy and attempts to show what future demand will be. It should be of value to anyone who has a limited background in science.

1. Background Reading Material

ENERGY: A CRISIS IN PUBLIC POLICY (1977)

Author: Melvin R. Laird
American Enterprise Institute for Public Policy Research;
1150 Seventeenth St., N. W.; Washington, D. C. 20036
Price: $1.25 Level: Teacher

This report by Melvin R. Laird, Chairman of AEI's National Energy Project, contends that the country faces not an energy crisis, but a crisis of public policy. The policy crisis with respect to fuel minerals and energy production is assessed, and a simplified energy policy is outlined.

ENERGY--A CRITICAL DECISION FOR THE UNITED STATES ECONOMY (1977)

Author: Samuel Dix
Energy Education Publishers; P. O. Box 6488;
Grand Rapids, MI 49506
Price: $5.95 Level: Teacher
(quantity discount available)

This book is an analysis of U. S. energy resources. The focus is on the social consequences of energy shortages and the conflict between energy realities and economic theory.

THE ENERGY ADVENTURES OF ERNIE AND BUD (1978)

Author: Loren Schultz
Alternative Energy Resources Organization (A.E.R.O.);
435 Stapleton Building; Billings, MT 59101
Price: $.30 Level: 1-6

This informative comic book features Ernie and Bud, two characters searching for materials with which to build a wind generator. It concludes with a cut-out project of a windmill model.

1. Background Reading Material

ENERGY--AN UNAPPRECIATED COMMODITY (1976)

Author: DeWayne Backhus
The Kansas School Naturalist, Division of Biology;
Emporia State University; Emporia, KS 66801
Price: free Level: 7-12

This booklet uses nontechnical language to discuss the energy problem. Topics covered include sources of energy and future trends in energy use.

ENERGY ANALYSIS: A NEW PUBLIC POLICY TOOL (1977)

Editor: Martha Gilliland
Westview Press; 5500 Central Avenue; Boulder, CO 80301
Price: $12.50 Level: Teacher

The papers presented here are intended to clarify the utility of energy analysis and to discuss the types of legislative policy decisions that can benefit from energy analysis. The introduction delineates the nature and substance of the controversy that surrounds some aspects of energy analysis.

ENERGY AND HUMAN WELFARE--A CRITICAL ANALYSIS (Three Volumes, 1975)

Editor: Barry Commoner, et al.
Macmillan, Inc.; 866 Third Ave.; New York, NY 10022
Price: $14.95 Level: 10-12
(each volume)

This set contains articles and opinions that support the environmentalist point of view on power production, especially with regard to nuclear power. The titles of the three volumes are: The Social Costs of Power Production, Alternative Technologies for Power Production, and Human Welfare: The End Use for Power.

1. Background Reading Material

ENERGY AND POWER (1971)

Author: Albert Hinkelbein
Franklin Watts, Inc.; 730 Fifth Ave.; New York, NY 10019
Price: $6.90 Level: 7-12

This illustrated book describes the various forms of energy resources, and their discovery and eventual harnessing through technology into useable power sources. Emphasis is on the humanistic and historical aspects of energy development.

ENERGY AND SOCIETY (1976)

Author: Timothy J. Healy
Boyd and Fraser Publishing Co.; 3627 Sacramento St.;
San Francisco, CA 94611
Price: $9.95 Level: 10-12

This book discusses the significance of energy in the course of history, explores current energy options, and describes processes of energy conversion at a level the student will find easy to understand. It also provides a discussion of the effects of pollution and gives the student an understanding of the interaction and influence of government, public, and industry interests on energy choices.

ENERGY AND THE CITIES (1977)

National League of Cities, Publications Dept.;
1620 Eye Street, N. W.; Washington, D. C. 20006
Price: $3.00 Level: 10-12

This special issue of Nation's Cities includes many articles on energy conservation. It also looks at energy boom towns and the relationship between energy and unemployment.

1. Background Reading Material

ENERGY AND THE EARTH MACHINE (1976)

Author: Donald Carr
W. W. Norton and Co., Inc., Publishers; 500 Fifth Avenue;
New York; NY 10036
Price: $10.00 Level: Teacher

In this book, Donald Carr, research chemist and environmental writer, describes the inefficiency of our use of the earth's energy resources and the practices and attitudes that have brought about the current situation of shortage. He presents a challenge for the future which involves the practical utilization of clean sources of energy through the application of technical brain power and common sense.

ENERGY AND THE ENVIRONMENT (1971)

Author: Theodore Brown
Charles E. Merrill Publishing Co.; 1300 Alum Creek Dr.;
Columbus, OH 43216
Price: $4.50 Level: 10-12

Because of the energy crisis and environmental problems, we must rethink our traditional material values. This book focuses on the interaction between energy production and environmental considerations.

ENERGY AND THE ENVIRONMENT (1975)

Author: John M. Fowler
McGraw-Hill, Inc.; 1221 Avenue of the Americas;
New York, NY 10020
Price: $9.50 Level: 10-12

This book discusses the role of energy in civilization, its conversion and consumption, the use of electricity, and the environmental consequences of energy production. Topics covered include nuclear and solar energy, energy conservation, and the hydrogen economy.

1. Background Reading Material

ENERGY AND THE ENVIRONMENT--A RISK-BENEFIT APPROACH (1977)

Authors: H. Ashley, R. L. Rudman, and C. G. Whipple
Pergamon Press; Maxwell House, Fairview Park;
Elmsford, NY 10523
Price: $13.75 Level: Teacher

This book discusses current and future energy technologies in a risk-benefit framework. It analyzes the most comprehensive way of dealing with the environmental and societal effects of energy systems.

ENERGY AND THE FUTURE (1975)

Author: Milton Rothman
Franklin Watts, Inc.; 730 Fifth Avenue;
New York, NY 10019
Price: $5.90 Level: 7-12

Written by a scientist, this book provides an in-depth exploration of the many available methods of generating energy. It contains photographs, a glossary, a bibliography, and an index.

ENERGY AND THE SIERRA CLUB (1977)

Sierra Club; 530 Bush St.; San Francisco, CA 94108
Price: Contact source for price information. Level: 10-12

This article outlines the Sierra Club's recommendations for a national energy policy, including suggestions for energy conservation, economic policies, utility rate structures, and development of new energy technologies. The article also gives information on various types of alternative energy sources.

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1. Background Reading Material

ENERGY AND THE SOCIAL SCIENCES--AN EXAMINATION OF RESEARCH NEEDS (1974)

Author: Hans H. Landsberg, et al.
The Johns Hopkins University Press; Baltimore, MD 21218
Price: $10.00 Level: Teacher

This book outlines our ignorance of many social science aspects of the energy problem that are important to its solution. It is an overview of research needs in this field, written for the layperson.

ENERGY AND U. S. FOREIGN POLICY (1974)

Authors: Joseph A. Yager and Eleanor B. Steinbert
Ballinger Publishing Co.; 17 Dunster St.;
Cambridge, MA 02138
Price: $9.95 Level: Teacher

This book contains a comprehensive background on the world energy situation and the energy policies of major countries. Special attention is given to the United States.

ENERGY AND YOU (1978)

U. S. Department of Energy, Office of Public Affairs;
Washington, D. C. 20585
Price: free Level: 7-12

The responsibility for conserving our dwindling energy supplies is shared by everyone. This pamphlet discusses methods of conserving and the benefits our nation will realize when we all become involved in the effort to reduce energy consumption.

ENERGY AS A FACTOR IN SOVIET FOREIGN POLICY (1976)

Author: Jeremy Russell
Lexington Books, D. C. Heath and Co. Distribution Center;
2700 North Richardt Ave.; Indianapolis, IN 46219
Price: $19.00 Level: Teacher

This book covers the role of major fuels and explores the U.S.S.R.'s relations with both Communist and non-Communist countries with regard to energy policy. Teachers may find the book useful as an aid to curriculum planning, particularly for current affairs, government, and economics classes.

1. Background Reading Material

ENERGY BASIS FOR MAN AND NATURE (1976)

Authors: Howard T. Odum and E. C. Odum
McGraw-Hill Book Co.; 1221 Avenue of the Americas;
New York, NY 10036
Price: $12.95 Level: 10-12

This book discusses the nature of the relationship between man, energy, and progress on both a social and scientific level. A special section on educational activities concentrates on decision-making.

THE ENERGY CONNECTION: AN INQUIRY INTO THE RELATION BETWEEN ENERGY AND ECONOMIC GROWTH (1978)

Author: Sidney Sonenblum
Ballinger Publishing Co.; 17 Dunster St.;
Cambridge, MA 02138
Price: $17.50 Level: Teacher

With a minimum of technical language, Mr. Sonenblum categorizes alternative energy policies and relates them to perceptions about economic growth. The discussion can help in forming conclusions about the severity of the energy crisis, the sources and consequences of energy consumption, and ways in which the future could differ from the past.

ENERGY CONSERVATION IN BUILDINGS: NEW ROLES FOR CITIES AND CITIZEN GROUPS (1975)

National League of Cities, Publications Dept.;
1620 Eye St., N. W.; Washington, D. C. 20006
Price: $3.00 Level: 10-12

This 40-page publication discusses concepts of energy conservation in buildings with which local officials and consumers need to become familiar. An annotated bibliography is included.

1. Background Reading Material

ENERGY CONSERVATION STRATEGIES (1976)

Author: Robert G. Healy and Henry R. Hertzfeld
Conservation Foundation; 1717 Massachusetts Ave., N. W.;
Washington, D. C. 20036
Price: $3.00 Level: 10-12

This book examines public policies which could be implemented to encourage energy conservation. It explores pricing, supply restriction and allocation, regulation, incentives to conserve, and informational programs in relation to currently-suggested energy conservation policies.

ENERGY CONSUMPTION IN MANUFACTURING (1974)

Author: John G. Myers, et al.
Ballinger Publishing Co.; 17 Dunster St.;
Cambridge, MA 02138
Price: $15.00 Level: Teacher

This book is a survey of energy consumption in the industrial sector of the United States. It contains many data tables, figures, and charts.

THE ENERGY CONTROVERSY: SOFT PATH QUESTIONS AND ANSWERS (1979)

Editor: Hugh Nash
Friends of the Earth; 124 Spear St.;
San Francisco, CA 94105
Price: $6.95 Level: Teacher

This book records Amory Lovins' presentation and defense of his soft energy theories at hearings before U. S. Senate committees. The dialogues cover such issues as costs, feasibility, and timing of renewable energy source technologies, and problems connected with present energy systems.

1. Background Reading Material

THE ENERGY CRISIS (1972)

Authors: Lawrence Rocks and Richard Runyon
Crown Publishers, Inc.; One Park Avenue;
New York, NY 10016
Price: $5.95 Level: 10-12

This is a study of the rapidly diminishing supply of fossil fuels and how life may be changed in the future. Economic, political, environmental, and military issues are covered.

THE ENERGY CRISIS (Revised 1978)

Author: Tad Szulc
Franklin Watts; 730 Fifth Ave.; New York, NY 10019
Price: $6.90 Level: 9-12

This edition contains an assessment of President Carter's energy program, a discussion of the impact of the Alaskan pipeline, and a new examination of the 1974 crisis in the light of subsequent developments. Particular attention is given to the role of the multinational oil companies and to changing public attitudes toward the energy crisis.

ENERGY CRISIS (Volume 1, 1969-73, Volume 2, 1974-75)

Editor: Lester Sobel
Facts on File, Inc.; 119 W. 57th St.; New York, NY 10019
Price: $14.95 (each volume) Level: Teacher

Energy Crisis provides summaries and analyses of world events leading up to and arising from the energy crisis. These volumes might be of particular interest to teachers in subject areas such as history, current affairs, or economics.

1. Background Reading Material

THE ENERGY CRISIS AND ENERGY FROM THE SUN (1974)

Editor: Matthew P. Thekaekara
Institute of Environmental Sciences; 940 E. Northwest Highway;
Mt. Prospect, IL 60056
Price: $6.00 Level: Teacher

This series of papers may be of particular interest to science teachers. Information is provided on the possibilities of solar conversion devices for future power needs.

THE ENERGY CRISIS AND THE ENVIRONMENT (1977)

Editor: Donald R. Kelley
Praeger Special Studies; 383 Madison Ave.;
New York, NY 10017
Price: $22.95 Level: Teacher

This book provides a study of how the relative scarcity or abundance of fuel supplies has affected environmental policies in industrial and developing nations. It gives special attention to political conflicts between industrial and energy company lobbies on the one hand, and environmental forces on the other.

ENERGY DELTA--SUPPLY VS. DEMAND (1976)

Editors: George W. Morgenthaler and Aaron N. Silver
Univelt Inc.; P. O. Box 28130; San Diego, CA 92128
Price: $25.00 Level: Teacher

This volume deals with means of reducing demand and increasing supply of energy. It discusses conservation of fossil energy sources with an emphasis on transportation and industry; and includes sections on alternative energy and advanced concepts of energy economics.

1. Background Reading Material

ENERGY, EARTH, AND EVERYONE (1979)

Author: Medard Gabel
Doubleday and Co., Inc.; 501 Franklin Avenue;
Garden City, NY 11530
Price: $6.95 Level: Teacher

This sourcebook, inspired by the ideas of noted architect and futurist R. Buckminister Fuller, presents alternative strategies for meeting world energy needs by 1985--without recourse to nuclear fission, fusion, or fossil fuels. It provides a penetrating look at the future and poses some intriguing questions about the realities and wisdom of present-day energy technology and policy.

ENERGY, ECONOMIC GROWTH, AND EQUITY IN THE U. S. (1979)

Author: Narasimhan P. Kannan
Praeger Special Studies; 383 Madison Ave.;
New York, NY 10017
Price: $16.95 Level: Teacher

This book attempts to determine how energy policy interacts with the economic environment by exploring the influence of 4 theoretical energy scenarios on future gross national product growth and on income distribution. The book concludes that accelerated conservation is the most beneficial policy because it provides the most stable growth choice.

ENERGY ECONOMICS (1977)

Author: Helmut Merklein with W. Carey Hardy
Gulf Publishing Co., Book Division; P. O. Box 2608;
Houston, TX 77001
Price: $12.95 Level: Teacher

The author examines the economic implications of the world-wide oil shortage and the misconceptions held by the citizens and governments of oil-importing nations, particularly the United States. This book is best suited for use by persons interested in learning about the economic implications of the end of the era of cheap energy.

1. Background Reading Material

THE ENERGY EXPLOSION (1976)

Authors: S. T. Butler and Robert Raymond
Doubleday and Co., Inc., Sales Office; 501 Franklin Ave.;
Garden City, NY 11530
Price: $2.95 Level: 10-12

The Energy Explosion presents basic facts and theories on energy. It covers everything from lasers to windmills.

ENERGY FOR A TECHNOLOGICAL SOCIETY: PRINCIPLES/ PROBLEMS/ ALTERNATIVES (1975)

Author: Joseph Priest
Addison-Wesley Publishing Co.; Reading, PA 01867
Price: $11.95 Level: Teacher

This book, which contains many graphs and tables, provides an introduction to several energy issues. Topics covered include the nature of energy, environmental aspects, nuclear power, alternate power sources, and the potential of energy conservation.

ENERGY FOR DEVELOPMENT: THIRD WORLD OPTIONS (1977)

Author: Denis Hayes
Worldwatch Institute; 1776 Massachusetts Ave., N. W.;
Washington, D. C. 20036
Price: $2.00 (quantity discount available) Level: Teacher

This booklet discusses possible paths for energy planners in developing countries, including development of petroleum resources, coal reserves, nuclear power, and conservation. Renewable energy sources and their advantages are discussed in detail, with the author concluding that the Third World may go solar before the industrial world.

1. Background Reading Material

ENERGY FOR THE 21ST CENTURY (1975)

Author: Franklyn Branley
Thomas Y. Crowell Co., Inc.; 10 East 53rd Street;
New York, NY 10022
Price: $6.50 Level: 4-6

This book explores the nature of energy. With simple text and some explanatory diagrams, it describes fossil fuels, nuclear energy, solar power, various alternate methods of generating power, and energy storage.

ENERGY FROM THE SUN: PRACTICE AND APPLICATIONS (1978)

Author: Stephen J. Coulson
Engineering Experiment Station, Seaton Hall,
Kansas State University; Manhattan, KS 66506
Price: $6.75 Level: 10-12

This report on solar energy systems for residential use considers active and passive systems for air conditioning and heating, water heating, and swimming pool heating. Design and construction procedures are shown in detail, with emphasis on costs, performance, tax benefits, energy savings, and economic payback.

ENERGY: FUTURE ALTERNATIVES AND RISKS (1974)

Ballinger Publishing Co.; 17 Dunster St.;
Cambridge, MA 02138
Price: $17.50 Level: Teacher

This book provides an analysis of the scope of the energy crisis. Possible solutions to the energy problem are given particular attention.

1. Background Reading Material

ENERGY FUTURES (1977)

Authors: Stewart W. Herman and James S. Cannon, with Alfred J. Malefatto
Editor: Leonard H. Orr
Ballinger Publishing Co.; 17 Dunster St.;
Cambridge, MA 02138
Price: $25.00 Level: Teacher

This study is a comprehensive documentation of newly-available energy technologies. It may provide teachers with background information for curriculum planning.

ENERGY: GLOBAL PROSPECTS 1985 - 2000 (1977)

Author: Carroll L. Wilson
McGraw-Hill, Inc.; 1221 Avenue of the Americas;
New York, NY 10020
Price: $6.95 Level: Teacher

This report on alternative energy strategies looks into the future using various scenarios and assumptions, with the transition away from oil as a prominent theme. The focus of the book is on the critical problems which will probably arise in the future.

THE ENERGY HANDBOOK (1979)

Author: Bonnie Morrison
American Home Economics Association; 2010 Massachusetts Ave.;
Washington, D. C. 20036
Price: Contact source for price information. Level: 11-12

The link between energy consumption and lifestyle is the focus of this book. An extensive bibliography includes energy resources from business, education, industry, government, and research.

1. Background Reading Material

ENERGY IN AN AGE OF LIMITED AVAILABILITY AND DELIMITED APPLICABILITY (1977)

Author: Philip Sporn
Pergamon Press; Maxwell House, Fairview Park;
Elmsford, NY 10523
Price: $5.50 Level: Teacher

This book offers an overall view of the energy crisis. After examining the causes of the energy crisis using the United States as a case study, the book proceeds to examine possible solutions involving development of new energy supplies and their more effective administration.

ENERGY INDEPENDENCE: PERSPECTIVES AND ISSUES (1978)

Editors: Randy Lake, Frank Cross, Robin Rowland
University of Kansas, Continuing Education Debate Program;
645 New Hampshire; Lawrence, KS 66044
Price: $6.75 Level: 10-12

This is a comprehensive handbook containing sections which analyze energy issues from a debate perspective, but which could be useful as a general information source on energy. The book includes hundreds of quotations from specialized sources on energy reserves, fossil fuels, nuclear power, and energy conservation, as well as an extensive bibliography.

ENERGY, INFLATION, AND INTERNATIONAL ECONOMIC RELATIONS (1975)

Authors: Curt Gasteyger, Louis Camu, and Jack N. Behrman
Praeger Special Studies; 383 Madison Ave.;
New York, NY 10017
Price: $19.95 Level: Teacher

This book, which is divided into 3 parts, covers many aspects of the energy problem. Part I is "The Western World and Energy"; Part II, "Spotlight on Inflation"; and Part III, "Toward A New International Order".

1. Background Reading Material

ENERGY INTO POWER: THE STORY OF MAN AND MACHINES (1967)

Author: E. G. Sterland
Natural History Press, c/o Doubleday and Co., Inc.;
501 Franklin Avenue; Garden City, NY 11530
Price: Contact source for price information. Level: 7-12

This is a history of man's search to exploit various sources of energy. Charts, tables, and color illustrations are included.

ENERGY--KEY TO FOOD PRODUCTION (1976)

Food and Energy Council; 909 University Avenue;
Columbia, MO 65201
Price: $3.00 (quantity discount available) Level: Teacher

This publication, taken from the proceedings of a national conference on electrical energy and food production, brings together the viewpoints of many authorities in the field of energy and food production, along with data and information on the many research projects in which they have been involved. The conference was held in 1976 and was sponsored by The Farm Electrification Council in cooperation with the Edison Electric Institute and the National Rural Electric Cooperative Association.

ENERGY OR EXTINCTION (1978)

Author: Sir Fred Hoyle
Heinemann Educational Books, Inc.; 4 Front Street;
Exeter, NH 03833
Price: $3.50 Level: 10-12

This book focuses attention on immediate energy planning and offers political and practical reasons for the free world to make itself energy independent. The author argues for use of nuclear power.

1. Background Reading Material

ENERGY POLICY (1979)

Congressional Quarterly, Inc.; 1414 22nd St., N. W.;
Washington, D. C. 20037
Price: $5.95 Level: 10-12

This book provides a thorough study of the debate on Capitol Hill over public policy for dealing with our energy problems. It contains detailed coverage of President Carter's energy program and other recent federal responses to the energy crisis.

ENERGY POLICY: A NEW WAR BETWEEN THE STATES? (1976)

American Enterprise Institute for Public Policy Research;
1150 Seventeenth St., N. W. ; Washington, D. C. 20036
(Note: This material is also available in audio- and video-cassettes. For information on cassettes, contact BNA Communications, Inc.; 9401 Decoverly Hall Road; Rockville, MD 20850.)
Price: $2.00 Level: Teacher

This is the transcript of a discussion which focuses on differences in energy policy among regions of the U. S. The moderator is Melvin Laird, former Secretary of Defense, and participants include Governor David Boren of Oklahoma, Senator Edward Brooke of Massachusetts, former Secretary of the Interior Stewart Udall, and former Federal Energy Administrator Frank Zarb.

ENERGY POLICY IN THE UNITED STATES (1978)

Editor: Seymour Warkov
Praeger Special Studies; 383 Madison Ave.;
New York, NY 10017
Price: $20.00 Level: Teacher

This book explores the social and behavioral aspects of energy consumption in the U. S. Special coverage is given to regionalism and energy policy, behavioral responses to energy shortages, public acceptance of alternative energy systems, and socio-behavioral factors such as energy conservation and social policy.

1. Background Reading Material

ENERGY POLICY--INDUSTRY PERSPECTIVES (1975)

Author: John E. Gray
Ballinger Publishing Co.; 17 Dunster St.;
Cambridge, MA 02138
Price: $7.95 Level: Teacher

This book uses case studies to explore how decisions are made in the oil, gas, electric, and nuclear industries. Various issues are discussed which involve management and the influences of government policy on industry energy decisions.

ENERGY: POWER FOR THE PEOPLE (1975)

Author: Laurence Pringle
Macmillan, Inc.; 866 Third Avenue; New York, NY 10022
Price: $6.95 Level: 4-6

This book provides a description of how energy is obtained from natural gas, coal, the atom, and alternate sources. Also included is a section covering energy conservation.

ENERGY PRICES 1960-73 (1974)

Ballinger Publishing Co.; 17 Dunster St.;
Cambridge, MA 02138
Price: $6.95 Level: Teacher

This book reviews current and historical costs of the principal sources of energy for many locations throughout the United States. It might prove useful as a reference in studying the relationship between energy and economics.

THE ENERGY QUESTION (1976)

Author: Gerald Foley with Charlotte Nassim
Penguin Books, Education Department; 625 Madison Avenue;
New York, NY 10022
Price: $3.95 Level: 10-12

This book is a survey of the world's energy resources and their potential for development. It describes how the development of industrial civilization is inextricably bound to energy use.

1. Background Reading Material

ENERGY: REGIONAL GOALS AND THE NATIONAL INTEREST (1976)

American Enterprise Institute for Public Policy Research;
1150 Seventeenth St., N. W.; Washington, D. C. 20036
Price: $3.50 Level: Teacher

Regional conflicts over national energy policy are discussed by leading industry representatives, environmentalists, and lawmakers in these conference proceedings. Topics include regional economic interests in energy, U. S. energy self-sufficiency, and compatibility of producer and consumer interests.

ENERGY REQUIREMENTS OF IRRIGATED CROPS IN THE WESTERN UNITED STATES (1976)

Authors: Dan Droskin and Earl Heady
Center for Agricultural and Rural Development; East Hall,
Iowa State University; Ames, IA 50011
Price: $1.00 Level: Teacher

This report outlines an analytical procedure that will determine energy use on irrigated cropland. From the data base provided can come changes in assumptions regarding water sources, irrigation methods, energy conversion efficiency, and fuel substitutions.

ENERGY RESOURCES (1975)

Author: Andrew Simon
Pergamon Press; Maxwell House, Fairview Park;
Elmsford, NY 10523
Price: $10.00 Level: 7-12

Energy Resources is a nontechnical look at power resources. It concentrates on mankind's endless search for energy to fuel civilization.

1. Background Reading Material

ENERGY SELF-RELIANCE

Institute for Local Self-Reliance; 1717 18th St., N. W.;
Washington, D. C. 20009
Price: $1.25 Level: 10-12

This booklet is a collection of articles on energy by various authors. It includes a look at the potential of solar cells, the economics of solar energy, and job creation through energy self-reliance.

ENERGY: SOURCES, USE, AND ROLE IN HUMAN AFFAIRS (1974)

Authors: Carol E. Steinhart and John S. Steinhart
Duxbury Press; 6 Bound Brook Court;
North Scituate, MA 02060
Price: $5.95 Level: 10-12

This book discusses several aspects of energy, with primary focus on energy policy. It covers energy sources, conservation, energy in food production, and ways in which energy use may modify climate.

ENERGY STRATEGY: THE ROAD NOT TAKEN? (1976)

Author: Amory Lovins
Friends of the Earth; 124 Spear; San Francisco, CA 94105
Price: $.50 Level: 10-12

In this article, Mr. Lovins proposes to replace hard energy technologies (centralized, high-technology facilities like nuclear stations and fossil fuel-powered electric plants) with soft energy technologies matched to their end uses. His ideas include the use of solar panels for home water heating and the use of process heat from factories to warm entire city districts.

1. Background Reading Material

THE ENERGY SYNDROME: COMPARING NATIONAL RESPONSES TO THE ENERGY CRISIS (1977)

Editor: Leon N. Lindberg
Lexington Books, D. C. Heath and Co. Distribution Center;
2700 North Richardt Avenue; Indianapolis, IN 46219
Price: $15.00 Level: Teacher

This book examines the efforts of seven countries in the area of energy policy. It analyzes the nature and consequences of divergent interests and of diverse and competing efforts at planning.

ENERGY TECHNOLOGY (1977)

U. S. Department of Energy, Technical Information Center;
P. O. Box 62; Oak Ridge, TN 37830
Price: free Level: 10-12

This 6-page booklet looks at research in energy technology. It describes the research needed to locate, recover, develop, store, and distribute various types of energy in a clean, convenient, and economical way.

ENERGY TECHNOLOGY V (1978)

Government Institutes, Inc.; 4733 Bethesda Ave., N. W.;
Washington, D. C. 20014
Price: $38.00 Level: Teacher

This publication is a reprint of the proceedings of the Fifth Energy Technology Conference held February 27-March 1, 1978, bringing together experts from private industry, government, and academia to discuss new and practical developments in energy technology. It is best suited for use as a reference guide to new ideas for solving the energy problem.

1. Background Reading Material

ENERGY: THE CONTINUING CRISIS (1977)

Author: Norman Metzger
Thomas Y. Crowell Co., Inc.; 10 East 53rd Street;
New York, NY 10022
Price: $12.95 Level: Teacher

In assessing the energy crisis, the author believes that the public is being lulled into complacency by new fossil fuel finds, and that an immense investment will be required to sufficiently raise coal production rates. Nuclear fusion, solar, and geothermal power are favored as alternate energy sources.

ENERGY: THE NEW ERA (1974)

Author: David Freeman
Vintage Books, Division of Random House, Inc., Education
Department S; 201 East 50th St.; New York, NY 10022
Price: $2.45 Level: Teacher

Mr. Freeman, author of a number of important administrative proposals on energy policy, analyzes how we squander 50% of our oil, coal, and natural gas by careless practices. He emphasizes international incentives and controls which must be initiated to ensure conservation and technological innovation.

ENERGY: THE RUDE AWAKENING (1977)

Author: Richard Bailey
Energy Education Publishers; P. O. Box 6488;
Grand Rapids, MI 49506
Price: $12.95 Level: Teacher

Mr. Bailey analyzes the British energy supply and demand situation with detailed identification of governmental responses before and after the Arab boycott of 1973. Mr. Bailey was a special advisor to the National Development Office of Great Britain during this period.

1. Background Reading Material

ENERGY: THE SOLAR PROSPECT (1977)

Author: Denis Hayes
Unipub; Box 433, Murray Hill Station; New York, NY 10016
Price: $2.00 Level: 10-12

The author describes current and potential contributions of solar resource technology, including solar heating and cooling and electrical generation systems. Wind and hydroelectric power are also discussed.

ENERGY: THE STATES' RESPONSE (1976, 1977, 1978)

Editor: Holly Higgins
National Conference of State Legislatures, Energy Policy Project; 1405 Curtis St., 23rd Floor; Denver, CO 80202
Price: $22.50 - 1976 edition Level: Teacher
$55.00 - 1977 edition
$45.00 - 1978 edition

These volumes contain the complete texts of all state energy bills enacted each year. Brief analyses of the bills are also included.

THE ENERGY TRAP (1975)

Author: D. S. Halacy, Jr.
Four Winds Press; 50 West 44th St.; New York, NY 10036
Price: $6.95 Level: 7-12

Beginning with a brief history of the use of energy, the author discusses energy in relation to the gross national product, pollution, and electrical blackouts. He considers fossil fuels, nuclear power, and solar energy.

1. Background Reading Material

ENERGY USE AND CONSERVATION INCENTIVES (1977)

Authors: William H. Cunningham and Sally Cook Lopreato
Praeger Special Studies; 383 Madison Avenue;
New York, NY 10017
Price: $18.50 Level: Teacher

This study examines the attitudes and behaviors of consumers and identifies widespread energy consumption patterns. Based on survey data, the authors discuss the policy implications of their findings for both the public and private sectors and outline new programs for energy conservation predicated on increased knowledge of consumer behavior.

ENERGY: USE, CONSERVATION, AND SUPPLY (Volume II, 1978)

Editors: Philip Abelson and Allen Hammond
American Association for the Advancement of Science,
Department E-9; 1515 Massachusetts Ave., N. W.;
Washington, D. C. 20005
Price: $6.00 Level: Teacher

This update of Volume I (published in 1974) gives a history and overview of our energy problems and examines ways to conserve energy and use it more efficiently. The articles included are by leading energy experts and cover the principal energy-related issues that face science and society today.

ENERGY USE IN AGRICULTURE: NOW AND FOR THE FUTURE (1977)

Author: Bill A. Stout, et al.
Council for Agricultural Science and Technology;
Agronomy Building, Iowa State University; Ames, IA 50011
Price: single copy free Level: Teacher

This report is a source of information on energy use for those concerned with agricultural practices and their impact on society as a whole. The primary emphasis of the book is on providing an understanding of the evolutionary nature of energy use and its relation to economics and advances in science and technology.

1. Background Reading Material

ENERGY USE IN U. S. AGRICULTURE: AN EVALUATION OF NATIONAL AND REGIONAL IMPACTS FROM ALTERNATIVE ENERGY POLICIES (1978)

Authors: Dan Droskin, Earl Heady, and Burton English
Center for Agricultural and Rural Development;
East Hall, Iowa State University; Ames, IA 50011
Price: $2.00 Level: Teacher

Energy Users Law 1977 covers laws governing energy use; energy shortages; and price increases including oil, propane, coal, natural gas, and electric rates. In Energy Users and Government Regulations 1978, the role of the U. S. Department of Energy is analyzed, along with recent legislative and regulatory developments.

ENERGY, WATER, AND THE WEST: THE IMPACT OF ENERGY DEVELOPMENT ON WESTERN WATER RESOURCES (1976)

The National Conference of State Legislatures, Office of Science and Technology; Executive Tower Inn,
1455 Curtis St.; Denver, CO 80202
Price: $5.00 Level: Teacher

Rational use of western water will require the development and application of new technologies and the coordination of energy and water policies among state and federal governments. This publication is the result of a workshop held in November, 1975, which focused on the impact of energy development on western water resources.

ENERGY WORKERS (1975)

Author: Neigoff
Albert Whitman and Company; 560 West Lake Street;
Chicago, IL 60606
Price: $4.00 Level: K-2

This simple introduction to energy concepts shows how energy makes things go, keeps us warm, and cools us off. Illustrations show various energy workers in action.

1. Background Reading Material

ENHANCED RECOVERY OF OIL AND GAS (1977)

U. S. Department of Energy, Technical Information Center;
P. O. Box 62; Oak Ridge, TN 37830
Price: free Level: 7-12

This booklet discusses the potential contributions of enhanced recovery to increasing our energy supply. Methods covered include the use of water, steam, chemicals, and combustion.

EXECUTIVE ENERGY DOCUMENTS (1978)

Superintendent of Documents, U. S. Government Printing
Office; Washington, D. C. 20402
Price: $4.50 Level: 10-12

This volume collects Presidential energy messages from June 4, 1971, through November 8, 1977, including President Carter's April 20, 1977, address introducing the National Energy Plan. It provides a unique historical perspective on the development of the energy crisis.

EXPLORING POWER TECHNOLOGY: BASIC FUNDAMENTALS (1976)

Author: John R. Walker
Goodheart-Wilcox Co.; 123 West Taft Dr.;
South Holland, IL 60473
Price: $6.96 Level: Teacher

This book provides a description of a wide variety of power plant types. Included are a number of kinds of engines traditionally used for electric generation, wind power plants, nuclear power plants, solar power units, and fuel cells.

FACING UP TO NUCLEAR POWER (1976)

Editors: Paul Abrecht and John Francis
Westminster Press; 908 Witherspoon Bldg.;
Philadelpha, PA 19107
Price: $3.95 (quantity discount available) Level: 10-12

This book presents an overview of the questions involved in the use of nuclear energy. It presents the conflict between the great energy potential of large-scale use of nuclear power and the various risks and ethical questions involved.

1. Background Reading Material

FACT SHEETS ON ALTERNATIVE ENERGY SOURCES (1977)

U. S. Department of Energy, Technical Information Center;
P. O. Box 62; Oak Ridge, TN 37830
Price: free Level: 10-12

Nineteen individual sheets (4 to 8 pages each) comprise this set. All types of alternative energy sources are discussed, with emphasis on the practicality and environmental effects of each.

FACTS ABOUT COAL IN THE UNITED STATES (1975)

Editor: John McCormick
Environmental Policy Center; 324 C Street, S. E.;
Washington, D. C. 20003
Price: $3.00 Level: Teacher

Recent years have brought about a change in coal production techniques, from primarily subsurface mining in the east, to a growing use of stripmining in the west. This report is an analysis of coal production, concentrating on the westward shift in coal development.

FAMILIES IN THE ENERGY CRISIS (1977)

Authors: Robert Perlman and Roland L. Warren
Ballinger Publishing Co.; 17 Dunster St.;
Cambridge, MA 02138
Price: $16.50 Level: Teacher

This book reports the effects of the 1973-74 and the 1977 energy crises on 1,440 families in the metropolitan areas of Hartford, Connecticut; Mobile, Alabama; and Salem, Oregon. It may prove useful as background material to social science and economics teachers.

1. Background Reading Material

FINANCING THE ENERGY INDUSTRY (1974)

Authors: Jerome E. Hass, Edward J. Mitchell, and
Bernell K. Stone
Ballinger Publishing Co.; 17 Dunster St.;
Cambridge, MA 02138
Price: $5.95 Level: Teacher

This book discusses the ability of the energy industries to finance the expansion which is required to meet ever-growing energy demands. Economics teachers may find this volume particularly interesting.

THE FIRST REACTOR (1967)

U. S. Department of Energy; Technical Information Center;
P. O. Box 62; Oak Ridge, TN 37830
Price: free Level: 7-12

Since its discovery, nuclear energy has held the promise of an unlimited supply of power. This booklet reveals the story of the first controlled nuclear chain reaction.

FOCUS ON ENERGY AND HOUSING (1978)

American Home Economics Association; 2010 Massachusetts Ave.;
Washington, D. C. 20036
Price: $5.00 (quantity discount available) Level: 10-12

This booklet is a compilation of 15 selected articles on vital issues of housing and energy. The effects of energy shortages on housing and household needs are emphasized.

FOSSIL ENERGY: OIL (1977)

U. S. Department of Energy, Technical Information Center;
P. O. Box 62; Oak Ridge, TN 37830
Price: free Level: 10-12

This booklet gives basic information about oil. The history of oil production, current uses, and new methods for oil recovery are included.

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1. Background Reading Material

FUEL AND ENERGY (1978)

Author: Herta S. Breiter
Raintree Children's Books; 205 West Highland Avenue;
Milwaukee; WI 53203
Price: $5.49 Level: 1-3

Fuel and Energy explains in simple terms basic concepts involved in the conversion of fuel to energy. It contains many full-color illustrations, an index, glossary, and bibliography.

FUEL CELLS: A NEW KIND OF POWER PLANT (1976)

U. S. Department of Energy, Technical Information Center;
P. O. Box. 62; Oak Ridge, TN 37830
Price: free Level: 10-12

This 6-page booklet explains how fuel cells produce electricity. It also features experimental demonstrations.

FUELS FROM BIOMASS (1977)

U. S. Department of Energy, Technical Information Center;
P. O. Box 62; Oak Ridge, TN 37830
Price: free Level: 10-12

Liquid and gaseous fuels can be produced from sources other than traditional fossil fuels. This pamphlet describes research aimed at developing the fuel potential of material such as wood, animal waste, and aquatic plants.

FUTURE ENERGY ALTERNATIVES (1978)

Author: Roy Meador
Ann Arbor Science Publishers, Inc.; P. O. Box 1425;
Ann Arbor, MI 48106
Price: $6.95 Level: 10-12

This book, in describing the energy crisis, covers both current and potential energy sources. The author makes predictions of the future use of a variety of alternate energy sources and discusses when they may be available.

1. Background Reading Material

FUTURE FACTS (1975)

Author: Stephen Rosen
Simon and Schuster; 630 Fifth Avenue; New York, NY 10020
Price: $10.95 Level: 10-12

Future Facts attempts to provide a preview of energy products, services, processes, and ideas likely to succeed before the end of this century. It uses simple language to tell about ongoing innovative developments in the field of power and energy.

GEOTHERMAL ENERGY IN THE WESTERN UNITED STATES (1978)

Authors: Sheldon L. Bierman, David F. Stover,
Paul A. Nelson, and William J. Lamont
Praeger Special Studies; 383 Madison Ave.;
New York, NY 10017
Price: $25.00 Level: Teacher

This volume examines the relationships between petroleum companies and utilities and evaluates how these relationships might affect the development of geothermal energy. It concludes that the geothermal holdings of large petroleum companies probably retard geothermal development by restricting its pace to a level compatible with petroleum company marketing.

GEOTHERMAL ENERGY PROSPECTS AND LIMITATIONS (1976)

Author: Hamilton Hess
Sierra Club; 530 Bush St.; San Francisco, CA 94108
Price: Contact source for price information. Level: 10-12

This article describes geothermal power as an attractive energy resource for spaceheating, industrial processing, hydroponics, and production of electric power. It looks at availability, retrieval, and use of this potential energy source.

1. Background Reading Material

GEOTHERMAL ENERGY: RESOURCES, PRODUCTION, STIMULATION
(1973)

Editors: Paul Kruger and Carel Otte
Stanford University Press; Stanford, CA 94305
Price: $17.50 Level: 10-12

This book, written in nontechnical language, is a compilation of papers on geothermal resources, exploration, and history. The Geysers power plant, a California electrical generation complex powered by geothermal energy, is discussed, with emphasis on its hardware, thermodynamic cycle, and environmental impact.

GOING, GOING, GONE?: THE WASTE OF OUR ENERGY RESOURCES
(1976)

Author: James Marshall
School and Library Department, G. P. Putnam's Sons;
Coward, McCann, and Geoghegan, Inc.; Berkley Publishing Corporation; P. O. Box P70; East Rutherford, NJ 07073
Price: $5.49 Level: 7-12

This book is devoted to the central issues of the energy crisis: waste and conservation. Energy-saving suggestions and many illustrations are included.

GOVERNMENT CREDIT SUBSIDIES FOR ENERGY DEVELOPMENT
(1976)

Editors: Murray Weidenbaum and Reno Harnish, with James McGowen
American Enterprise Institute for Public Policy Research;
1150 Seventeenth St., N. W.; Washington, D. C. 20036
Price: $3.00 Level: Teacher

This study examines proposals for fostering energy independence in the United States through federal assistance to private energy firms. It concludes that such policies would be inefficient because they fail to provide the market incentives needed to increase domestic energy production.

1. Background Reading Material

HARD AGROUND (1978)

Author: Ron Winslow
W. W. Norton and Co., Inc.; 500 Fifth Avenue;
New York, NY 10036
Price: $10.95 Level: 10-12

As our dependency on foreign oil grows, so do the chances for catastrophic ocean oil spills. This book documents the grounding of the Argo Merchant which resulted in the worst such accident to date

HARNESS THE WIND (1977)

Authors: Joseph Brown and Anne Brown
Dodd, Mead and Company; 79 Madison Avenue;
New York, NY 10016
Price: $5.95 Level: 4-12

Harness the Wind covers the history of windmills throughout the world, how they were designed and operated, and the various work they performed. It also discusses the "rebirth" of wind machines as an alternative, nonpolluting source of power.

HARNESSING THE SUN: THE STORY OF SOLAR ENERGY (1976)

Author: David C. Knight
William Morrow and Co., Inc.; 105 Madison Avenue;
New York, NY 10016
Price: $5.49 Level: 4-6

This book, which contains many photographs, provides an introduction to solar energy. It discusses the pioneers in solar energy utilization, solar collectors, solar homes, and solar electricity.

HARNESSING THE WIND FOR HOME ENERGY (1978)

Author: Dermot McGuigan
Garden Way Publishing; Charlotte, VT 05445
Price: $4.95 Level: 10-12

In this book, Mr. McGuigan presents a survey of numerous working windplants. Included is a look at the many purposes for which wind power is well suited.

1. Background Reading Material

HEATED WATER FROM POWER PLANTS (1976)

U. S. Department of Energy, Technical Information Center;
P. O. Box 62; Oak Ridge, TN 37830
Price: Free Level: 10-12

This booklet offers a brief overview of the environmental effects of the warm water that is discharged by some power plants into rivers, lakes, or the oceans. This booklet is 5 pages long.

HISTORY OF OIL WELL DRILLING (1971)

Author: J. E. Brantly
Gulf Publishing Co., Book Division; P. O. Box 2608;
Houston, TX 77001
Price: $37.50 Level: Teacher

History of Oil Well Drilling uses over 1,500 illustrations and 1,600 pages to trace the evolution of equipment and methods used to drill for oil. The Ruffner brine well, the Drake oil well, and Lucas Spindletop are a few of the historical landmarks documented.

HOW DID WE FIND OUT ABOUT ENERGY? (1975)

Author: Isaac Asimov
Walker and Company; 720 Fifth Avenue; New York, NY 10019
Price: $4.95 Level: 4-6

This book discusses mechanical energy, heat energy, and nuclear energy. It also covers energy conservation and explains various energy transformations.

1. Background Reading Material

HOW ENERGY AFFECTS THE ECONOMY (1978)

Editor: A. Bradley Askin
Lexington Books, D. C. Heath and Co. Distribution Center;
2700 North Richardt Ave.; Indianapolis, IN 46219
Price: Contact source for price information. Level: Teacher

This book, divided into a review of the energy-related events of the past five years and a forecast for the future, discusses the relationship between the energy sector and the economy. Teachers may find the book useful as background material for curriculum planning for courses in economics.

HOW INDUSTRIAL SOCIETIES USE ENERGY: A COMPARATIVE ANALYSIS

Authors: Joel Darmstadter, Joy Dunkerley, Jack Alterman
Resources for the Future; 1755 Massachusetts Ave., N. W.;
Washington, D. C. 20036
Price: $16.95 Level: Teacher

This study looks at why the U. S. uses more energy per dollar of national output than other industrial nations. It records the differences in consumption of nine industrial nations and analyzes how much of it is attributable to 1) composition of a nation's economic output and activities, and 2) amount of energy needed to do a particular job.

HOW TO SAVE GASOLINE--PUBLIC POLICY ALTERNATIVES FOR THE AUTOMOBILE (1975)

Author: Sorrell Wildhorn, et al.
Ballinger Publishing Co.; 17 Dunster Place;
Cambridge, MA 02138
Price: $18.50 Level: Teacher

This study evaluates public policies for conserving energy used by automobiles and reports on the public dialogue concerning possible enactment of the various policies. Two types of policies are considered: those that raise the price of driving, and those that aim to improve average fuel economy through regulatory means.

1. Background Reading Material

HOW TO UNDERSTAND SOLAR TECHNOLOGY AND ECONOMICS (1976)

Author: Harvey Michaels
Solar Data; 13 Evergreen Rd.; Hampton, NH 03842
Price: $7.50 (quantity discount available) Level: 7-12

This book, written in nontechnical language, is an introduction to solar energy. It includes a method for calculating the cost of solar energy relative to oil, gas, or electric power.

THE HYDROGEN ENERGY ECONOMY (1977)

Authors: Edward M. Dickson, John W. Ryan, and Marilyn H. Smulyan
Praeger Special Studies; 383 Madison Ave.; New York, NY 10017
Price: $22.95 Level: Teacher

In discussing the economic feasibility and costs of a hydrogen-based economy, this book assesses the impact of a hydrogen economy on existing energy economics, and details technical obstacles, safety problems, public attitudes, and special interests of oil and gas industries. It argues that the length of time needed for an advanced hydrogen technology makes it imperative that the government implement research in the very near future.

HYDROGEN FUEL (1978)

U. S. Department of Energy, Technical Information Center; P. O. Box 62; Oak Ridge, TN 37830
Price: free Level: 10-12

Hydrogen Fuel presents hydrogen as a way to store energy and as a possible alternative to scarce fossil fuels. It describes methods of producing and storing this potentially abundant fuel.

1. Background Reading Material

ILLUSTRATED SOLAR ENERGY GUIDE (1977)

Author: Alan Goldberg
Horizon Industries; 12606 Burton St.;
North Hollywood, CA 91605
Price: $3.00 (quantity discount available) Level: 10-12

This illustrated booklet provides a complete introduction to the use of solar energy. Written in clear, nontechnical language, it includes basic theory and practical information.

IMPACTS OF COAL-FIRED POWER PLANTS ON FISH, WILDLIFE, AND THEIR HABITATS (1978)

Superintendent of Documents, U. S. Government Printing Office; Washington, D. C. 20402
Price: $4.50 Level: Teacher

This is an assessment of expected impacts associated with coal-fired power stations upon terrestrial and aquatic life. The complete process of electricity production from coal is covered, from coal delivery to disposal of wastes.

AN IMPORT STRATEGY FOR ACHIEVING OIL SECURITY AND REDUCING PRICES (1975)

Authors: D. H. Newlon and N. V. Breckner
Lexington Books, D. C. Heath and Co. Distribution Center;
2700 North Richardt Ave.; Indianapolis, IN 46219
Price: $10.00 Level: Teacher

During the past 25 years, the U. S. has ceased to be a net exporter of oil and must now import much of its petroleum. This book details an effective import policy designed to assure regular oil supplies for this country.

1. Background Reading Material

THE INEVITABILITY OF PETROLEUM RATIONING IN THE UNITED STATES (1978)

Author: Carter Henderson
World Future Society; P. O. Box 30369;
Washington, D. C. 20014
Price: $3.75 Level: Teacher

The author sees the oil era quickly coming to an end in this country. He expresses the belief that rationing of petroleum supplies is the most effective, equitable system for getting America through the period before we reach the era of sustainable energy.

INSIDE THE HEAT PUMP (1976)

Author: James Curley
Carrier Air Conditioning; Carrier Parkway, P. O. Box 4808;
Syracuse, NY 13221
Price: $1.70 Level: 10-12

This short book is an introduction to the energy-saving heat pump. It covers the theory of operation and control and includes detailed descriptions of certain elements.

INTERNATIONAL ARRANGEMENTS FOR NUCLEAR FUEL REPROCESSING (1977)

Editors: Abram Chayes and W. Bennett Lewis
Ballinger Publishing Co.; 17 Dunster St.;
Cambridge, MA 02138
Price: $16.50 Level: Teacher

This book is a report of the International Pugwash Symposium, which focused on the technical, political, and economic issues of multinational control of the nuclear reactor fuel cycle. This book may be of particular use to teachers of science and current affairs.

1. Background Reading Material

INTRODUCTION TO ENERGY TECHNOLOGY (1976)

Author: Marion L. Shepard, et al.
Ann Arbor Science Publishers; P. O. Box 1425;
Ann Arbor, MI 48106
Price: $16.50 Level: Teacher

This book, containing many references and illustrations, deals with aspects of energy utilization. Conventional and nonconventional forms of energy are discussed.

AN INTRODUCTION TO THE USE OF WIND (1975)

Author: Douglas Coonley
Total Environmental Action, Inc.; Church Hill;
Harrisville, NH 03450
Price: $2.00 Level: 7-12

This is a pamphlet which briefly introduces the key characteristics of wind energy use. Many illustrations are included.

IRAN (1978)

Author: Emil Lengyel
Franklin Watts, Inc.; 730 Fifth Ave.; New York, NY 10019
Price: $4.90 Level: 5-7

Iran has assumed increasing importance because of its vast reserves of oil. This book gives an overview of the history, geography, and culture of Iran, and includes maps, a bibliography, an index, and black and white photographs.

IRAQ (1978)

Author: George Fichter
Franklin Watts, Inc.; 730 Fifth Ave.; New York, NY 10019
Price: $4.90 Level: 4-6

Iraq's vast economic power is based on oil reserves that may prove second only to Saudi Arabia. This book surveys the history, geography, and culture of Iraq and includes maps, a bibliography, an index, and photographs.

1. Background Reading Material

IS NUCLEAR POWER SAFE? (1975)

American Enterprise Institute for Public Policy Research;
1150 Seventeenth St., N. W.; Washington, D. C. 20036
(Note: This material is also available in audio- and videocassettes. For information on cassettes, contact BNA Communications, Inc.; 9401 Decoverly Hall Road; Rockville, MD 20850.)
Price: $2.00 Level: Teacher

In this transcript, Daniel Ford, Craig Hosmer, Ralph Lapp, Lawrence Moss, and Ralph Nader discuss the safety aspects of large-scale nuclear generation of electricity. Melvin Laird is moderator of the discussion.

JAPAN'S SEARCH FOR OIL (1976)

Author: Yuan-li Wu
Hoover Institution Press, Stanford University;
Stanford, CA 94305
Price: $4.95 Level: Teacher

This book analyzes Japan's response to the 1973-1974 oil crisis and deals with security-related consequences for U. S.-Japanese relations. Japan's efforts to stay afloat economically and prosper in the wake of the growing debate on the world's energy supply are also discussed.

KUWAIT AND THE RIM OF ARABIA (1978)

Author: Gilda Berger
Franklin Watts, Inc.; 730 Fifth St.; New York, NY 10019
Price: $4.90 Level: 4-6

Kuwait and the other countries on the perimeter of the Arabian Peninsula have gained importance out of proportion to their size as a result of their control of vast oil reserves. This book, with photographs, a bibliography, and an index, explores how these countries are dealing with their new-found, oil-derived wealth.

Background Reading Material

LIVING LIGHTLY (1973)

Author: Tom Bender
Rain Publications; 2270-B N. W. Irving; Portland, OR 97210
Price: $2.00 Level: 10-12

Living Lightly is an early overview of designing and building energy-efficient, resource-conserving shelters. Included are ideas on heating, cooling, lighting, and how to deal with waste.

LIVING WITH ENERGY: ALTERNATIVE SOURCES IN YOUR HOME (1978)

Author: Ronald Alves
Penguin Books, Education Dept.; 625 Madison Avenue;
New York, NY 10022
Price: $7.95 Level: 10-12

This is a book of readings about alternative energy sources which are practical and environmentally sound. It includes a preface by Ralph Nader, well-known consumer advocate, plus 190 black and white and 76 color illustrations, a glossary, a list of sources, and a selected bibliography.

LOW-COST ABUNDANT ENERGY: PARADISE LOST (1973)

Author: H. H. Landsberg
Resources for the Future, Inc.;
1755 Massachusetts Ave., N. W.; Washington, D. C. 20036
Price: $.25 Level: Teacher

This booklet attempts to explain elements of the energy crisis and to explore the underlying trends and events that began long before the Arab oil embargo. It looks beyond the immediate future at ideas for the sharing of insufficient supplies with the least damage to the U. S. economy.

1. Background Reading Material

MAGNETIC FUSION (1978)

U. S. Department of Energy, Technical Information Center;
  P. O. Box 62; Oak Ridge, TN 37830
Price: free   Level: 7-12

Magnetic Fusion explains the process by which the sun produces energy. This process, when harnessed by fusion reactors, could make the U. S. energy-independent by the year 2000.

MAN, ENERGY, SOCIETY (1976)

Author: Earl Ferguson Cook
W. H. Freeman; 660 Market Street; San Francisco, CA 94104
Price: $14.95   Level: Teacher

Man, Energy, Society offers a comprehensive survey of modern energy issues. Included is a history of energy use, a description of the dimension of contemporary energy problems, and a discussion of possible alternatives.

MANAGING THE ENERGY TRANSITION, VOLUME I (1976)

Author: Roger F. Naill
Ballinger Publishing; 17 Dunster St.; Cambridge, MA 02138
Price : $20.00   Level: 10-12

This book examines the future behavior of the United States energy system as it shifts away from dependence on oil and gas. It is written in clear, nontechnical language.

THE MENACE OF ATOMIC ENERGY (1977)

Author: Ralph Nader
W. W. Norton and Co.; Inc.; 500 Fifth Avenue;
  New York, NY 10036
Price: $10.95   Level: Teacher

In this book, Ralph Nader offers a comprehensive overview of the health and environmental dangers associated with nuclear power generation. The intent is to give the layman insights into the scientific basis for arguments against nuclear power.

1. Background Reading Material

MIDDLE EAST OIL IN A REVOLUTIONARY AGE (1976)

Author: George Lenczowski
American Enterprise Institute for Public Policy Research;
1150 Seventeenth St., N. W.; Washington, D. C. 20036
Price: $2.50 Level: Teacher

The legal and economic positions of the international oil industry in the Middle East are analyzed against the background of political upheaval and economic change there. The major part of this study is devoted to the energy crisis of 1973-1974, the embargo, and subsequent price increases.

MODELING ENERGY-ECONOMY INTERACTIONS: FIVE APPROACHES (1977)

Editor: Charles J. Hitch
Resources for the Future; 1755 Massachusetts Ave., N. W.;
Washington, D. C. 20036
Price: $7.50 Level: 10-12

At some point conventional oil and gas will cease to be primary sources of energy. These papers look at long-range, gradual changes and provide a valuable insight into our energy future.

N L C ENERGY READER (1977)

Editors: Richard Mounts and Ethan Thorman
National League of Cities, Publications Dept.;
1620 Eye St., N. W.; Washington, D. C. 20006
Price: Contact source for price information. Level: 10-12

This booklet outlines the recently-adopted policy of the National League of Cities on energy, which stresses the need for a transition from non-renewable to renewable forms of energy. It would be useful for individual research into the feasibility of alternative energy sources.

1. Background Reading Material

NADER'S NUCLEAR ISSUES: A CRITIQUE BY DR. RALPH LAPP OF RALPH NADER'S CHARGE THAT "NUCLEAR FISSION POWER IS UNSAFE, UNNECESSARY, AND UNRELIABLE"

Author: Ralph E. Lapp
Reddy Communications, Inc.; 537 Steamboat Rd.;
Greenwich, CT 06830
Price: $6.50 Level: 10-12

This is a critique of Ralph Nader's ideas concerning nuclear power. It looks at the issues of safety and reliability and presents the positive case for nuclear power.

THE NATIONAL ENERGY PLAN - 1977

Ballinger Publishing Co.; 17 Dunster St.;
Cambridge, MA 02138
Price: $6.95 Level: 10-12

This report is President Carter's official blueprint for United States energy policy as introduced to Congress in April, 1977. It begins with a summary of the National Energy Plan and provides background information on topics such as the origins of U. S. energy problems and the continuing energy crisis.

THE NATIONAL ENERGY PROBLEM (1974)

Editors: Robert H. Connery and Robert S. Gilmour
Lexington Books, D. C. Heath and Co. Distribution Center;
2700 North Richardt Avenue; Indianapolis, IN 46219
Price: $14.00 Level: Teacher

This book treats the energy crisis as a long-term problem which will affect American lifestyles and military strategy for years to come. The 19 contributors offer specific programs for solving the problem, including a national policy that clearly defines goals and establishes administrative procedures for meeting them.

1. Background Reading Material

NEW DIMENSIONS TO ENERGY POLICY (1978)

Editor: Robert Lawrence
Lexington Books, D. C. Heath and Co. Distribution Center;
2700 North Richardt Avenue; Indianapolis, IN 46219
Price: Contact source for price information. Level: Teacher

Focusing on domestic energy issues, this book presents new approaches to energy policy. Political, economic, and sociological perspectives are stressed.

A NEW LOOK AT ENERGY SOURCES (1974)

American Society of Agronomy; 677 South Segoe Road;
Madison, WI 53711
Price: free Level: Teacher

The papers collected in this publication consider the U. S. energy situation and the energy requirements of agriculture. The possibilities of obtaining new energy sources from agricultural products is explored.

THE NEW PIONEER'S HANDBOOK (1975)

Author: James Bohlen
Schocken Books; 200 Madison Avenue; New York, NY 10016
Price: $8.95 Level: 10-12

Bohlen presents an overview of practical methods to achieve individual self-reliance. The emphasis is on appropriate energy technology.

NEWS BOOKS: ENERGY AND ECOLOGY (1975)

The Reading Laboratory, Inc.; 55 Day Street;
South Norwalk, CT 06845
Price: $2.25 (quantity discount available) Level: 5-12

This book utilizes ten specially-edited news service articles which explore selected facets of the energy/ecology question. Topics include "Coal--the Once and Future King", "Nuclear Power--For and Against", "Sun Power", and "Energy from the Sea".

1. Background Reading Material

NUCLEAR ENERGY (1978)

Author: Dan Halacy
Franklin Watts, Inc.; 730 Fifth Ave.; New York, NY 10019
Price: $4.90 Level: 4-12

This book explains nuclear energy, beginning with its discovery in 1896 and continuing through the controversial issues surrounding its modern use. Included are diagrams, a bibliography, glossary, chronology, and index.

NUCLEAR ENERGY AND THE FUTURE

Fortune Magazine; Room 18-340, Time-Life Building,
Rockefeller Center; New York, NY 10020
Price: Contact source for price information. Level: 10-12

This collection includes five position papers dealing with industry's view of the energy problem. The emphasis is on how the energy crisis may change our economy and way of life.

NUCLEAR ENERGY RESOURCES: A GEOLOGIC PERSPECTIVE (1978)

Superintendent of Documents, U. S. Government Printing
Office; Washington, D. C. 20402
Price: $1.00 Level: 10-12

This book describes the materials that fuel nuclear reactors and explains the fission reaction. Included is a discussion of the demand for nuclear fuel and the occurrence of these materials in nature.

NUCLEAR FUELS POLICY: REPORT OF THE ATLANTIC COUNCIL'S NUCLEAR FUELS POLICY WORKING GROUP (1976)

Lexington Books, D. C. Heath and Co. Distribution Center;
2700 North Richardt Ave.; Indianapolis, IN 46219
Price: $15.00 Level: Teacher

This book provides a broad look at the issue of nuclear fuel and energy. It covers alternatives to nuclear energy, commercial uses of nuclear energy, and policy implications.

1. Background Reading Material

NUCLEAR POWER (1976)

Author: Walter C. Patterson
Penguin Books, Education Dept.; 625 Madison Avenue;
New York, NY 10022
Price: $3.50 Level: 10-12

Written in everyday language, this book describes nuclear technology and how it works--and can fail to work. An extensive annotated bibliography is included.

NUCLEAR POWER AND SOCIAL PLANNING: THE CITY OF THE SECOND SUN (1977)

Author: Gerald Garvey
Lexington Books, D. C. Heath and Co. Distribution Center;
2700 North Richardt Ave.; Indianapolis, IN 46219
Price: $15.00 Level: Teacher

This book examines methods of controlling the development of nuclear power. The author shows the relationship between energy policy and social planning as he proposes directions for the development of American nuclear policy.

NUCLEAR POWER AND THE SIERRA CLUB (1977)

Sierra Club; 530 Bush St.; San Francisco, CA 94108
Price: Contact source for price information. Level: 9-12

This article outlines the stand of the Sierra Club in opposition to nuclear power and the reasons behind that opposition. The article will be of use in examining the social and environmental issues raised by the use of nuclear power as a source of future energy.

1. Background Reading Material

THE NUCLEAR POWER DEBATE (1977)

Author: Desaix Myers, III
Praeger Special Studies; 383 Madison Ave.;
New York, NY 10017
Price: $16.95 Level: Teacher

Based on information from government, public interest groups, and the nuclear power industry, this book analyzes the data behind the arguments for and against nuclear power. It concludes that operational safety problems may be manageable, but that there is insufficient information to demonstrate the long-term reliability of nuclear power.

NUCLEAR POWER IN MINNESOTA: THE ILLUSORY BARGAIN (1976)

Authors: Jane Chinowsky and Tim Niles
Minnesota Public Interest Research Group;
2412 University Ave., S. E.; Minneapolis, MN 55414
Price: $1.00 Level: 10-12

This report discusses nuclear power in Minnesota. Topics covered include health and property consequences of nuclear power, technological difficulties, and economics.

NUCLEAR POWER ISSUES AND CHOICES (1977)

Ballinger Publishing Co.; 17 Dunster St.;
Cambridge, MA 02138
Price: $7.95 Level: Teacher

This report is a comprehensive analysis of nuclear power economics. It describes the economics of specific energy resources and production technologies and analyzes the broad questions of energy in our economy: the likely changes in demand for energy over the next half-century, anticipated directions of the allocation of energy resources, and alternatives for ensuring adequate energy and economic growth.

1. Background Reading Material

NUCLEAR POWER: THE BARGAIN WE CAN'T AFFORD (1977)

Author: Richard Morgan
Environmental Action Foundation; The DuPont Circle Bldg., Suite 74; Washington, D. C. 20036
Price: $3.50 Level: Teacher

This book addresses many of the problems associated with the expansion of nuclear power as a primary energy source. A reference list is included.

NUCLEAR POWER: THE FIFTH HORSEMAN (1976)

Author: Denis Hayes
Unipub; Box 433, Murray Hill Station; New York, NY 10016
Price: $2.00 Level: 10-12

The author examines issues to be faced concerning increased use of nuclear power--environmental impact, economics of nuclear power, nuclear terrorism. The publication can be used in studying these issues as well as the expansion of alternative energy sources.

NUCLEAR POWER: THE UNVIABLE OPTION (1976)

Author: John Berger
Dell Publishing Co., Inc., Educational Sales Department; P. O. Box 3000; Pine Brook, NJ 07058
Price: $2.50 Level: Teacher

An exposé of the dangers of nuclear power as an energy source, this book also examines energy alternatives such as solar power. The introduction is by Dr. Linus Pauling, well-known scientist.

1. Background Reading Material

OPEC AND THE MIDDLE EAST (1977)

Editor: Russell A. Stone
Praeger Special Studies; 383 Madison Ave.;
New York, NY 10017
Price: $21.50 Level: Teacher

This book examines the impact of income from petroleum on political, economic, and social developments in the Middle East as a whole and focuses specifically on changes in Kuwait, Egypt, Iraq, Algeria, and Syria. Social studies teachers may find that this book provides background material suitable for classroom use.

OPEC: POLICY IMPLICATIONS FOR THE UNITED STATES (1979)

Praeger Special Studies; 383 Madison Ave.;
New York, NY 10017
Price: $18.50 Level: Teacher

Exploring the economic impact of the selected policy responses to OPEC price rises and potential embargoes, this volume details the oil cartel's actions and powerful influence in 1973-74. The book considers possible alternative policies for alleviating the impact of future oil shortages, including stockpiling, tariffs, and import quotas.

OCEAN THERMAL ENERGY CONVERSION (1977)

U. S. Department of Energy, Technical Information Center;
P. O. Box 62; Oak Ridge, TN 37830
Price: free Level: 10-12

Temperature differences between warm ocean surface water and cooler water beneath the sea can be used to generate power. This pamphlet explains how such a project might work.

1. Background Reading Material

OFFSHORE OIL: COSTS AND BENEFITS (1976)

American Enterprise Institute for Public Policy Research;
1150 Seventeenth St., N. W.; Washington, D. C. 20036
(Note: This material is also available in audio- and videocassettes. For information on cassettes, contact BNA Communications, Inc.; Decoverly Hall Road; Rockville, MD 20850.)
Price: $2.00 Level: Teacher

This is the transcript of a round table discussion that concluded a two-day conference held by AEI on the issues involved in development of offshore oil. Participants in the discussion are Governor Brendan Byrne of New Jersey; oceanographer Jacques-Yves Cousteau; Assistant Secretary of the Interior Royston Hughes; and H. J. Haynes, Chairman of the Board of Standard Oil of California; moderator is Mayor Tom Bradley of Los Angeles.

OIL (1977)

Authors: John Cranfield and David Buckman
Crane, Russak and Co., Inc.; 347 Madison Avenue;
New York, NY 10017
Price: $7.95 Level: 7-12

Oil is an illustrated, introductory book on the oil industry, covering oil discovery, transport, refining, development of offshore oil reserves, and the future of oil production and use. Facts, figures, a glossary, and an index are included.

OIL (1977)

Author: Barbara Lowery
Franklin Watts; 730 Fifth Avenue; New York, NY 10019
Price: $4.47 Level: 2-4

This book introduces young readers to the myriad uses of petroleum. Many photographs and line drawings are included.

1. Background Reading Material

OIL AND NATURAL GAS (1978)

Author: Betsy Harvey Kraft
Franklin Watts; 730 Fifth Avenue; New York, NY 10019
Price: $4.90 Level: 4-12

This book, illustrated with black and white photographs, discusses how oil and gas are discovered, taken from the ground, marketed, and used. It also covers oil spills and how they are handled, OPEC, and conservation.

OIL AND REGIONAL DEVELOPMENT (1977)

Author: Konrad Schliephake
Praeger Special Studies; 383 Madison Ave.;
New York, NY 10017
Price: $18.95 Level: Teacher

This book examines how oil revenues can contribute to regional development of producing countries with large populations and favorable conditions for speedy industrialization. It demonstrates how oil production can be used to lower the cost of energy to all economic sectors and analyzes the role of oil as the primary raw material for secondary industries.

OIL AND THE OUTER COASTAL SHELF--THE GEORGES BANK CASE (1973)

Author: William R. Ahern, Jr.
Ballinger Publishing Co.; 17 Dunster Place;
Cambridge, MA 02138
Price: $17.50 Level: Teacher

This book analyzes the possibility of finding oil and gas in the Georges Bank area off the Atlantic coast near the U.S.-Canadian border. It compares the economic effects of the area's production with alternative means of meeting the country's growing fuel demand.

1. Background Reading Material

THE OIL COUNTRIES OF THE MIDDLE EAST (1973)

Author: Emil Lengyel
Franklin Watts; 730 Fifth Ave.; New York, NY 10019
Price: $4.90 Level: 6-9

This book looks at formerly poor desert lands where oil money has turned beggars into billionaires, solved many problems, and created others. Photographs, maps, and an index complement the text.

THE OIL PRODUCING INDUSTRY IN YOUR STATE (1978)

Independent Petroleum Association of America, OPI Requests;
1101 Sixteenth St., N. W.; Washington, D. C. 20036
Price: free Level: 10-12

This publication, which is updated annually, provides a reference guide to industry in the 32 oil-producing states in the United States. Topics covered on a state-by-state basis include acreage leased, number of petroleum-related jobs, taxes, number of stripper and other producing wells, total production, reserves, active rigs, consumption, and costs of drilling.

THE ONCE AND FUTURE RESOURCE: A HISTORY OF SOLAR ENERGY (1977)

Author: Michael Silverstein
Energy Marketing Associates, Inc.; P. O. Box 488,
Kenmore Station; Boston, MA 02215
Price: Contact source for price information. Level: 10-12

This is a short history of solar energy usage. It might serve as an introduction to a more detailed study of the potential of solar energy.

1. Background Reading Material

OPPORTUNITIES FOR ENERGY SAVING IN CROP PRODUCTION (1978)

Superintendent of Documents, U. S. Government Printing
Office; Washington, D. C. 20402
Price: $3.75 Level: Teacher

Of potential use to agriculture teachers, this book evaluates various methods by which energy use in major crop production activities may be reduced. Areas examined include fertilizer production, crop drying, and irrigation.

THE OTHER ENERGY CRISIS: FIREWOOD (1975)

Author: Erik P. Eckholm
Unipub; Box 433, Murray Hill Station; New York, NY 10016
Price: $2.00 Level: 10-12

Deforestation of our nation's woodlands is leading to accelerated soil erosion, severe flooding, and declining soil fertility. This book can be used to explore reforestation programs and for research into alternative fuel sources.

OUR ENERGY FUTURE (1976)

Author: Don E. Kash, et al.
University of Oklahoma Press; 1005 Asp Avenue;
Norman, OK 73019
Price: $7.95 Level: Teacher

This book summarizes many different energy research and development projects. Brief project descriptions and treatments of the state-of-the-art in various areas of energy research are augmented by photographs of many facilities.

1. Background Reading Material

OUROBOROS EAST: TOWARDS AN ENERGY CONSERVING URBAN DWELLING

Williamson Book Center, University of Minnesota;
Minneapolis, MN 55455
Price: $5.50 Level: 10-12

This book describes a house in St. Paul, Minnesota, which was the result of a special design project of University of Minnesota architecture students. It contains ideas and information for the non-architect and includes a complete bibliography of references on building with alternative energy systems and energy conservation principles.

PERSPECTIVES ON U. S. ENERGY POLICY (1976)

Editor: Edward J. Mitchell
Praeger Special Studies; 383 Madison Ave.;
New York, NY 10017
Price: $19.95 Level: Teacher

In challenging the conventional wisdom about the energy crisis, this book argues that Americans suffer from shortages not so much because of overconsumption and dwindling supplies, but because of seesawing policies of government intervention in the energy market. It covers U. S. energy policy on natural gas and electric power and reviews the performance of the Federal Energy Office, one of the predecessors of the U.S. Department of Energy.

PETROLEUM CONSERVATION IN THE UNITED STATES: AN ECONOMIC ANALYSIS (1971)

Author: Stephen L. McDonald
Resources for the Future; 1755 Massachusetts Ave., N. W.;
Washington, D. C. 20036
Price: $14.00 Level: Teacher

The author develops an economic framework for analyzing state regulation of oil and gas. He concludes the existing regulations fall short of assuring optimum oil production conditions in the areas regulated, which include well spacing, production rates, use of associated gas, and exploration.

1. Background Reading Material

THE POLITICAL ECONOMY OF THE OIL IMPORT QUOTA (1977)

Author: Yoram Barzel
Hoover Institution Press, Stanford University;
Stanford, CA 94305
Price: $8.95 Level: Teacher

This book provides an analysis of the domestic petroleum industry under the oil import quotas, which were a significant element of U. S. energy policy from 1958 to 1973. Teachers may find this book useful as an aid to understanding the ways in which such quotas work in actual practice.

THE POLITICS OF ALTERNATIVE TECHNOLOGY (1975)

Author: David Dickson
Universe Books; 381 Park Ave. South; New York, NY 10016
Price: $3.50 Level: Teacher

This is a detailed study of the social, economic, and historical background of modern technology and an indictment of that technology on the grounds that it is wasteful, polluting, and socially alienating. It would be useful in studying environmental issues and modern society's use of energy.

POTENTIAL ENERGY: AN ANALYSIS OF WORLD ENERGY TECHNOLOGY (1976)

Author: Michael Kenward
Cambridge University Press; 32 East 57th Street;
New York, NY 10022
Price: $5.95 Level: 10-12

This book provides a nontechnical survey of energy resources and technology. Topics covered include coal, oil, nuclear, solar, and geothermal systems.

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1. Background Reading Material

THE POVERTY OF POWER: ENERGY AND ECONOMIC CRISIS (1977)

Author: Barry Commoner
Bantam Books, Inc.; 666 Fifth Avenue; New York, NY 10019
Price: $2.75 Level: Teacher

This book deals with changing lifestyles and the methods used to obtain and utilize energy. The focus is on solar power as an important part of a new system of energy consumption that is environmentally and economically sound.

POWER FROM THE WIND (1948)

Author: Putnam
Van Nostrand Reinhold Company; 450 West 33rd Street;
New York, NY 10001
Price: $10.95 Level: 10-12

This illustrated study of wind energy covers the principles underlying the design of a wind-powered electrical generator. The actual application to a large-scale unit is shown.

THE POWER OF OIL (1977)

Author: Richard J. Walton
The Seabury Press; 815 Second Avenue; New York, NY 10017
Price: $7.95 Level: 10-12

The Power of Oil explores the economic, social, and political implications of the oil industry beginning with the discovery of oil in Pennsylvania in the mid-1800's and ending with the current international oil crisis. The reading level is suitable for secondary students.

1. Background Reading Material

THE PROCEEDINGS ON THE CONFERENCE ON THE NATIONAL ENERGY POLICY (1977)

American Association for the Advancement of Science, Sales Department; 1515 Massachusetts Ave., N. W.; Washington, D. C. 20005
Price: $6.00 Level: Teacher

This volume contains the proceedings of a one-day conference which brought together independent experts in energy and related fields to discuss President Carter's National Energy Plan as passed by Congress in October, 1978. Special consideration is given to the energy gap; import limitation strategy; government responsibility; domestic supplies of oil, gas, and coal; and international implications of the plan.

PROGRESS AS IF SURVIVAL MATTERED: A HANDBOOK FOR A CONSERVER SOCIETY (1977)

Editor: Hugh Nash
Friends of the Earth; 124 Spear St.; San Francisco, CA 94105
Price: $6.95 Level: 10-12

This anthology of articles explores the issues critical to building an abundant, healthy future and recommends measures for reaching this goal. Among the areas surveyed are education, energy, population, health, transportation, the environment, science, and technology.

PUBLIC INTEREST LOBBIES: DECISION-MAKING ON ENERGY (1976)

Author: Andrew McFarland
American Enterprise Institute for Public Policy Research; 1150 Seventeenth St., N. W.; Washington, D. C. 20036
Price: $3.00 Level: Teacher

This study examines the energy policies advocated by public interest groups such as Common Cause, the Ralph Nader consumer organizations, the League of Women Voters, the Sierra Club, Consumers Union, the Consumer Federation of America's Energy Task Force, and Americans for Energy Independence. McFarland details the constructive role of such groups and concludes that future public support for these organizations will likely increase.

1. Background Reading Material

PUT THE SUN TO WORK TODAY (1978)

U. S. Department of Energy, Technical Information Center;
P. O. Box 62; Oak Ridge, TN 37830
Price: free Level: 10-12

This booklet describes solar principles, equipment, and costs for persons considering home installation of solar systems. In addition, a brief account of other renewable energy sources is included.

PUTTING THE SUN TO WORK (1979)

Author: Jeanne Bendick
Garrard Publishing Co.; 1607 North Market Street;
Champaign, IL 61820
Price: $4.74 Level: 4-6

This illustrated book discusses ways in which the energy of the sun can be used to replace our dwindling fossil energy resources. The author explains the principles, investigates the practicality, and explores the possibilities of using solar energy to do our everyday work.

THE QUEST FOR OIL (1977)

Author: W. G. Roberts
S. G. Phillips, Inc.; 305 W. 86th St.; New York, NY 10024
Price: $9.95 (quantity discount available) Level: 7-12

This book, written in nontechnical language, answers the basic questions of what oil is, where it is found, and how fuels are produced and used. It traces the story of oil from its discovery to present-day processing and stresses the importance of oil now and in the future.

1. Background Reading Material

RAYS OF HOPE: THE TRANSITION TO A POST-PETROLEUM WORLD (1977)

Author: Denis Hayes
W. W. Norton and Co., Inc., Publishers; 500 Fifth Avenue;
New York, NY 10036
Price: $3.95 Level: Teacher

Denis Hayes sees the energy choice we face today as one between a centralized and necessarily authoritarian nuclear-powered world and a safe and equitable solar-powered world. In Rays of Hope he explores these options in detail, examining how a shift to sustainable resources will affect our lifestyles, diets, and jobs.

REGULATION OF THE NATURAL GAS PRODUCING INDUSTRY (1972)

Editor: Keith C. Brown
Resources for the Future; 1755 Massachusetts Ave., N. W.;
Washington, D. C. 20036
Price: $10.00 Level: Teacher

This book discusses the structure of the natural gas industry and its role in determining price supply and demand. It also examines whether there is a regulation-induced shortage of natural gas and discusses regulatory alternatives to current policies.

REHABILITATION POTENTIAL OF WESTERN COAL LANDS (1974)

Ballinger Publishing Co.; 17 Dunster St.;
Cambridge, MA 02138
Price: $7.95 Level: Teacher

This is a study of the potential for returning lands that have been surface-mined in the American West to their former productive and aesthetic conditions. A number of findings and recommendations regarding land reclamation are discussed in the book.

1. Background Reading Material

THE ROLE OF LOCAL GOVERNMENT IN A NATIONAL ENERGY STRATEGY (1977)

Editor: Richard Mounts
National League of Cities, Publications Department;
1620 Eye St., N. W.; Washington, D. C. 20006
Price: $3.00 Level: 10-12

This booklet explains several conservation and solar technology experiments that have been going on at the local level and identifies a need for new federal policy regarding support of such developments. It could serve as a basis for individual research and study.

SAUDI ARABIA (1978)

Author: Geraldine Woods
Franklin Watts; 730 Fifth Ave.; New York, NY 10019
Price: $4.90 Level: 4-6

In just fifty years, oil has transformed Saudi Arabia from a poor, backward country of desert nomads into one of the wealthiest, most powerful nations in the world. This book, complete with photographs, index, and bibliography, explores the recent history of Saudi Arabia, emphasizing oil, politics, and nationalism.

SAVING ELECTRICITY (1977)

Authors: Sam and Beryl Epstein
Garrard Publishing Co.; 107 Cherry St.;
New Canaan, CT 06840
Price: $4.48 Level: 2-4

The need for energy conservation is strikingly presented in this book about a utility blackout in a small town. Explanations of how electricity is generated and ways to save it are also given.

1. Background Reading Material

THE SEVEN SISTERS: THE GREAT OIL COMPANIES AND THE WORLD THEY MADE (1975)

Author: Anthony Sampson
Learning Ventures, A Multimedia Division of Bantam Books, Inc.; 666 Fifth Avenue; New York, NY 10019
Price: $2.25 Level: 10-12

Exxon Corporation; Gulf Oil Corporation; Texaco, Inc.; Mobil Oil Corporation; Standard Oil Company of California; British Petroleum Company; and Shell Oil Company: five huge American companies, one British company, and one Anglo-Dutch concern make up a powerful group of seven corporations--the Seven Sisters --which dominate the international market in oil. With emphasis on the people who made the Seven Sisters what they are, those who control them today, and their enemies, this book traces their birth, development, and future prospects.

SHARING SMALLER PIES (1975)

Author: Tom Bender
Rain Publications; 2270-B N. W. Irving; Portland, OR 97210
Price: $2.00 Level: 10-12

Sharing Smaller Pies is a short discussion of how changing resource/energy realities are giving rise to new human values and individual actions in our institutions and politics. Bender's book represents the type of thinking that has helped set the stage for appropriate technology.

SOCIAL ISSUES RESOURCES SERIES: ENERGY (1976)

Social Issues Resources, Inc.; P. O. Box 2507,
8141 Glades Rd.; Boca Raton, FL 33432
Price: Contact source for price information. Level: 10-12

This 2-volume set contains reprints of articles, opinions, and research reports on social issues pertaining to energy that have appeared in various newspapers and periodicals around the country since before the onset of the energy crisis. Many facets of the energy problem are covered, and a study guide is included.

1. Background Reading Material

SOFT ENERGY PATHS (1977)

Author: Amory Lovins
Friends of the Earth; 124 Spear St.;
San Francisco, CA 94105
Price: $6.95 Level: 10-12

This is a book-length extension of the article, "Energy Strategy: The Road Not Taken?", first published in the October, 1976, issue of Foreign Affairs. It explains Mr. Lovins' ideas for changing the philosophy of energy development and production in the U. S. toward smaller-scale, decentralized systems based on renewable energy sources.

SOFT TECHNOLOGIES, HARD CHOICES (1978)

Author: Colin Norman
Friends of the Earth; 124 Spear St.;
San Francisco, CA 94105
Price: $2.00 Level: 10-12

This booklet explains that in choosing energy sources and technologies appropriate to end uses, developing nations need to give attention to the potential impact on people, social systems, and the natural environment. They also need to take into account the ecological sustainability of the new methods of energy generation.

THE SOLAR CONSPIRACY

Author: John Keyes
Morgan and Morgan, Inc.; 145 Palisade St.;
Dobbs Ferry, NY 10522
Price: $3.95 Level: 10-12

This book argues that major corporations with a stake in maintaining the status quo in the field of energy production and consumption are deliberately impeding research and application of solar energy. The author further charges that governmental bodies and regulatory agencies are collaborating in what he terms a vast fraud, with the consumer and the environment as twin victims.

1. Background Reading Material

SOLAR ELECTRICITY FROM PHOTOVOLTAIC CONVERSION (1977)

U. S. Department of Energy, Technical Information Center;
P. O. Box 62; Oak Ridge, TN 37830
Price: free Level 10-12

Electricity produced from the sun's rays is possible today. This pamphlet tells how solar cells, composed of silicon and similar materials, are used in this process.

SOLAR ELECTRICITY FROM THERMAL CONVERSION (1977)

U. S. Department of Energy, Technical Information Center;
P. O. Box 62; Oak Ridge, TN 37830
Price: free Level: 10-12

Thermal conversion is one of the most promising methods of using the sun's energy. This pamphlet describes thermal conversion systems.

SOLAR ENERGY (1978)

U. S. Department of Energy, Technical Information Center;
P. O. Box 62; Oak Ridge, TN 37830
Price: free Level: 10-12

As we move away from fossil fuels solar energy is becoming more important. This short booklet discusses the various ways solar energy can be used to produce power.

SOLAR ENERGY (1977)

Author: Bruce Anderson
McGraw-Hill Book Co., Order Services; Manchester Road;
Manchester, MO 63011
Price: $23.95 Level: 10-12

This book provides an extensive treatment of the rationale, design, and construction of buildings utilizing solar energy. Hundreds of methods of applying solar energy in building design, ranging from simple to complex, are discussed.

1. Background Reading Material

SOLAR ENERGY (1975)

Authors: H. Messel and S. T. Butler
Pergamon Press; Maxwell House, Fairview Park;
Elmsford, NY 10523
Price: $8.25 Level: 10-12

This book discusses many aspects of solar energy. It covers such topics as world energy resources and consumption, energy conversion, the nature of solar energy, and solar devices.

SOLAR ENERGY AND SHELTER DESIGN (1973)

Author: Bruce Anderson
Total Environmental Action, Inc.; Church Hill;
Harrisville, NH 03450
Price: $7.00 Level: 10-12

This is a nontechnical look at basic elements underlying the use of solar energy in the home, with a discussion of ways to collect, store, use, and conserve energy. Useful tables, charts, and a bibliography are included.

SOLAR ENERGY AND YOUR HOME (1978)

National Solar Heating and Cooling Information Center;
P. O. Box 1607; Rockville, MD 20850
Price: free Level: 7-12

This booklet is designed to answer some of the most frequently asked questions about how solar energy can be put to work at home. Illustrations, diagrams, and a solar energy bibliography are included.

1. Background Reading Material

SOLAR ENERGY AS A NATIONAL RESOURCE (1973)

Solar Energy Panel, Department of Mechanical Engineering,
University of Maryland; College Park, MD 20742
Price: Contact source for price information. Level: 10-12

This is an overview of the potential of solar energy. It includes the recommendations of over forty scientists regarding solar research and development in the United States.

SOLAR ENERGY FOR AGRICULTURE AND INDUSTRY (1978)

U. S. Department of Energy, Technical Information Center;
P. O. Box 62; Oak Ridge, TN 37830
Price: free Level: 10-12

The sun can be used for a variety of applications in agriculture and industry. This booklet describes uses such as drying crops, heating farm buildings, and providing process heat.

SOLAR ENERGY FOR MAN (1973)

Author: B. J. Brinkworths
Centerline Co.; 401 South 36th St.; Phoenix, AZ 85034
Price: $11.45 Level: 10-12

This is a comprehensive study of the practical uses of solar energy. Many illustrations are included.

SOLAR ENERGY NOW (1974)

Author: James Spaulding
Sierra Club; 530 Bush St.; San Francisco, CA 94108
Price: Contact source for price information. Level: 9-12

This reprint from the Sierra Club Bulletin of May, 1974, discusses the National Science Foundation's research programs to study solar and wind energy and biofuels, and the Foundation's support of research in developing geothermal energy. Various other research projects dealing with alternative energy sources are also examined.

1. Background Reading Material

SOLAR ENERGY: THE AWAKENING SCIENCE (1976)

Author: Daniel Behrman
Little, Brown and Co.; 34 Beacon St.; Boston, MA 02106
Price: $12.50 Level: Teacher

This book describes the author's personal survey of solar energy research, his interviews with experts, and his examinations of various solar homes and research facilities. It contains many photos of key facilities.

THE SOLAR ENERGY TIMETABLE (1978)

Author: Denis Hayes
Worldwatch Institute; 1776 Massachusetts Ave., N. W.;
Washington, D. C. 20036
Price: $2.00 (quantity discount available) Level: 10-12

This booklet details how most of the world's energy could come from the sun by the year 2025. The author cites initial moves in that direction by some governments and calls for major resource commitments to assure conversion to sustainable energy sources.

SOLAR HEAT IN LAYMAN LANGUAGE (1977)

Author: Donald Porter
Custom Solar Heating Systems Co.; P. O. Box 375;
Albany, NY 12201
Price: $6.95 (quantity discount available) Level: 7-12

This is a nontechnical explanation of the applications and successful uses of air instead of water as a medium of solar heat transfer. Emphasis is on research and development which resulted in a new design for a flat-plate solar collector.

1. Background Reading Material

THE SOLAR POWERED IRRIGATION PUMP (1978)

U. S. Department of Energy, Technical Information Center;
P. O. Box 62; Oak Ridge, TN 37830
Price: free Level: 10-12

Using conventional fuels to power irrigation pumps is becoming increasingly expensive. This pamphlet describes how the sun can be used to pump water to irrigate crops.

SOLAR '77

Superintendent of Documents; U. S. Government Printing
Office; Washington, D. C. 20402
Price: $1.80 Level: 7-12

This is a primer on the use of solar energy in the home. The principles and promise of solar energy are described in simple language.

SPECIAL REPORT ON ENERGY (1978)

National Wildlife Federation, Department EEM;
1412 Sixteenth St., N. W.; Washington, D. C. 20036
Price: free Level: 7-12

This illustrated report deals with our national energy problem and what can be done to overcome it. Included in the booklet is a glossary of energy terms.

STATE STRIP MINING LAWS (1977)

Author: John C. Doyle, Jr.
Environmental Policy Institute; 317 Pennsylvania Ave., S. E.;
Washington, D. C. 20003
Price: $4.00 Level: Teacher

This is an analysis of statutory provisions governing the surface mining of coal in 28 coal-producing states. It is a detailed and thorough report suitable for curriculum planning in secondary science, government, and environmental education classes.

1. Background Reading Material

STEPPING STONES: APPROPRIATE TECHNOLOGY AND BEYOND (1978)

Editors: Lane deMoll and Gigi Coe
Rain Publications; 2270-B N. W. Irving;
Portland, OR 97210
Price: $7.95 Level: 10-12

Stepping Stones brings together many of the classic essays that have given rise to the appropriate technology movement. Contributors include E. F. Schumacher, Wendell Berry, Margaret Mead, John Todd, David Morris, Amory Lovins, Tom Bender, and Lee Johnson.

STIRLING CYCLE ENGINES (1977)

Author: Andy Ross
Solar Engines; 2937 West Indian School Rd.;
Phoenix, AZ 85017
Price: $5.50 (quantity discount available) Level: 10-12
$31.00 with model Stirling Engine

This book, which takes the reader through the world of the Stirling Hot Air Engine, contains many illustrations and a history and description of work now being done with this engine. As world supplies of fossil fuels are depleted, many countries and industries are beginning research on this engine which can run on any source of heat.

THE STORY OF OFFSHORE OIL (1977)

Author: Harry Edward Neal
Julian Messner Division, Simon and Schuster;
1230 Avenue of the Americas; New York, NY 10020
Price: $6.64 Level: 3-6

This book describes the task of exploring for new oil deposits, the backbreaking work of maintaining the relatively few producing oil wells that are discovered, and the life aboard offshore oil rigs. Also discussed is the controversy between environmentalists and oil companies over resource production in this oil-rich but ecologically-sensitive offshore environment.

1. Background Reading Material

STRIKING A BALANCE: ENVIRONMENT AND NATURAL RESOURCES POLICY IN THE NIXON-FORD YEARS (1977)

Author: John C. Whitaker
American Enterprise Institute for Public Policy Research;
1150 Seventeenth St., N. W.; Washington, D. C. 20036
Price: $5.00 Level: Teacher

In this book, Whitaker recounts the responses of two U. S. administrations to shifting public opinion on environmental issues. Particular emphasis is placed on the period after the 1973 petroleum boycott, which saw marked increase in public concern over the development of new coal and oil reserves.

THE STRIP MINE HANDBOOK (1978)

Environmental Policy Institute; 317 Pennsylvania Ave., S. E.;
Washington, D. C. 20003
Price: $1.75 (quantity discount available) Level: Teacher

This booklet explains the Surface Mining Control and Reclamation Act (Public Law 95-87) of 1977, the first federal law governing strip mining. The explanation of public rights as provided by the law should prove particularly interesting to people in regions where strip mining occurs.

SUN! A HANDBOOK FOR THE SOLAR DECADE (1978)

Editor: Stephen Lyons
Friends of the Earth/Solar Actions, Inc.; 124 Spear St.;
San Francisco, CA 94105
Price: $2.95 Level: 10-12

This book explores energy policy, the sun as an energy resource, and the steps that can be taken now toward a solar future. The 350-page collection of essays calls for modern nations to build their energy plans on a sustainable foundation now.

1. **Background Reading Material**

SUN/EARTH (1978)

Author: Richard L. Crowther
Charles Scribner's Sons, Publishers; 597 Fifth Avenue;
New York, NY 10017
Price: $8.95 (quantity discount available) Level: 10-12

This nontechnical book illustrates and explains solar and other alternative energy systems. Illustrated with drawings, the book includes a glossary of technical terms, an appendix of energy-related data, an annotated bibliography, and an index.

SUN POWER: FACTS ABOUT SOLAR ENERGY (1978)

Authors: Steve Gadler and Wendy Adamson
Lerner Publications Co.; 241 First Avenue North;
Minneapolis, MN 55401
Price: $6.95 Level: 6-12

This book is an introduction to solar energy. It describes a number of solar systems, from simple solar devices currently in use to complex experimental systems which are still in the planning stage.

SUNSPOTS (1975)

Author: Steve Baer
Total Environmental Action, Inc.; Church Hill;
Harrisville, NH 03450
Price: $4.00 Level: 10-12

This is a collection of ideas, essays, and anecdotes on solar energy. It deals with the principles of solar collectors, heat exchangers, heat engines, rock storage, and skylids in a conversational style.

1. Background Reading Material

TAKING CHARGE--A NEW LOOK AT PUBLIC POWER (1976)

Authors: Richard Morgan, Tom Riesenberg, Michael Troutman
Environmental Action Foundation; The DuPont Circle Bldg.,
Suite 74; Washington, D. C. 20036
Price: Contact source for price information. Level: Teacher

This book argues that there is an answer to the never-ending cycle which produces higher electric utility rates, environmental harm, and more and more power plants. A look at the performance of private utilities and the regulations governing them leads the authors to conclude that public ownership might be the answer.

TAPPING EARTH'S HEAT (1978)

Author: Patricia Lauber
Garrard Publishing Co.; 1607 North Market Street;
Champaign, IL 61820
Price: $4.74 Level: 4-6

This book, which includes simple experiments, presents ways in which we can tap and use the earth's great heat energy. It explains the natural manifestations of geothermal energy--volcanoes, hot springs, and geysers--and shows how it is being used to heat buildings and generate electricity.

THERMAL PROCESSING OF MUNICIPAL SOLID WASTE FOR RESOURCE AND ENERGY RECOVERY (1976)

Authors: Norman J. Weinstein and Richard F. Toro
Ann Arbor Science Publishers; P. O. Box 1425;
Ann Arbor, MI 48106
Price: $20.00 Level: Teacher

This book discusses how energy and useful materials may be recovered from city wastes. It covers costs, air pollution, and the control of liquid and solid effluents.

1. Background Reading Material

TIME BOMB (1978)

Author: Peter van der Linde
Doubleday and Co., Inc., Sales Office; 501 Franklin Avenue;
Garden City, NY 11530
Price: $8.50 Level: Teacher

According to van der Linde, liquefied natural gas (LNG) is America's newest and most dangerous energy source, with an explosive capacity comparable to that of a nuclear blast. Time Bomb is an investigation of this threat--from the new generation of supertankers being built to transport LNG, to the huge but inadequately-safeguarded storage areas now being erected all around the U. S.

TOO MUCH GARBAGE (1974)

Author: Partricia Lauber
Garrard Publishing Co.; 107 Cherry St.;
New Canaan, CT 06840
Price: $4.48 Level: 1-6

One of the best ways to conserve energy is by recycling wastes and resources. This book offers some simple suggestions for what to do with the 250 million tons of garbage discarded each year.

TOWARD A SOLAR CIVILIZATION (1978)

Editor: Robert H. Williams
Sidney Kramer Books; 1722 H Street, N. W.;
Washington, D. C. 20006
Price: $12.50 Level: Teacher

Toward a Solar Civilization brings together articles by prominent researchers and policy analysts which cover the technological aspects of solar energy. Particular attention is given to practical economic considerations.

1. Background Reading Material

THE TRANS-ALASKA PIPELINE (Volume 1, 1975; Volume 2, 1976; Volume 3, 1977)

Authors: Volumes 1 and 2 - Lawrence J. Allen
Volume 3 - Kristina Lindberg and Barry Provorse
Gulf Publishing Co., Book Division; P. O. Box 2608;
Houston, TX 77001
Price: Volume 1 - $30.00 Level: 7-12
Volume 2 - $27.50
Volume 3 - $32.00

These three volumes, 1) The Beginning, 2) South to Valdez, 3) Emerging Alaska, contain over 350 color photographs. They tell the story of the quest for oil in Alaska, construction of the Alyeska pipeline, and the beauty of Alaska and her people.

TRANSPORTATION POLICIES AND ENERGY CONSERVATION (1976)

Author: Ralph Rechel
Conservation Foundation; 1717 Massachusetts Ave.;
Washington, D. C. 20036
Price: $3.50 Level: Teacher

This book looks at uses of energy in transportation. It compares the efficiency of various transportation systems and studies public policies and subsidies received by each.

TRANSPORTING NATURAL GAS FROM THE ARCTIC: THE ALTERNATIVE SYSTEMS (1977)

Author: Walter J. Mead, with George Rogers and Rufus Smith
American Enterprise Institute for Public Policy Research;
1150 Seventeenth St., N. W.; Washington, D. C. 20036
Price: $3.25 Level: Teacher

This study analyzes proposed systems for transporting natural gas from Alaska's Prudhoe Bay to the lower 48 states. Economic evaluations are emphasized, but environmental effects and the issue of Canadian sovereignty are also appraised.

1. Background Reading Material

U. S. AGRICULTURAL PRODUCTION UNDER LIMITED ENERGY SUPPLIES, HIGH ENERGY PRICES, AND EXPANDING AGRICULTURAL EXPORTS (1976)

Authors: Dan Droskin and Earl Heady
Center for Agricultural and Rural Development, East Hall,
Iowa State University; Ames, IA 50011
Price: $2.50 Level: Teacher

This study evaluates changes that might occur in U. S. agriculture under conditions of energy shortages, expressed in both soaring price and restricted supply and examines a pattern of agriculture which minimizes energy requirements. This will be of particular interest to agriculture teachers.

U. S. COAL AND THE ELECTRIC POWER INDUSTRY (1975)

Author: Richard L. Gordon
Resources for the Future; 1755 Massachusetts Ave., N. W.;
Washington, D. C. 20036
Price: $12.50 Level: Teacher

This book is an analysis of the U. S. coal industry. It is of particular value to those interested in the economics of coal and its use for the generation of electricity.

U. S. ENERGY POLICY: WHICH DIRECTION? (1977)

American Enterprise Institute for Public Policy Research;
1150 Seventeenth St., N. W.; Washington, D. C. 20036
(Note: This material is also available in both audio- and videocassettes. For information on cassettes, contact BNA Communications, Inc.; 9401 Decoverly Hall Road; Rockville, MD 20850.)
Price: $2.00 Level: Teacher

This is the transcript of a discussion between Secretary of Defense Melvin Laird, U. S. Representative Morris Udall, energy administrator John O'Leary, and Edward Mitchell, with commentator John Daly acting as moderator. The focus is on reducing dependence on foreign oil and increasing domestic production of fuel minerals in an environmentally safe manner.

1. Background Reading Material

U. S. ENERGY RESEARCH AND DEVELOPMENT POLICY (1975)

Authors: J. Herbert Hollomon and Michel Grenon
Ballinger Publishing Co.; 17 Dunster St.;
Cambridge, MA 02138
Price: $16.50 Level: Teacher

This book contains a proposal for a U. S. policy for energy research and development and includes such topics as government's role in the energy system, and energy research and development in industrialized countries other than the United States. Many notes, tables, and figures are included.

UNACCEPTABLE RISK: THE NUCLEAR POWER CONTROVERSY (1976)

Author: McKinley C. Olsen
Learning Ventures, c/o Bantam Books, Inc.;
666 Fifth Avenue; New York, NY 10019
Price: $2.25 Level: 10-12

This book states that nuclear power now poses a threat that has reached crisis proportions. The effects on broad areas such as the environment, public health, and economics are evaluated in light of factual data.

THE UNITED STATES AND THE GLOBAL STRUGGLE FOR MINERALS (1979)

Author: Alfred E. Eckes, Jr.
University of Texas Press; Box 7819; Austin, TX 78712
Price: $18.95 Level: Teacher

The 1973-74 oil embargo alerted Americans to the dangers of resource exhaustion and dependence on unreliable foreign supplies of petroleum. This comprehensive study shows that these concerns are not unique to the 1970's: the quest for secure and stable supplies of industrial materials has been an important theme of international relations and American diplomacy since 1914.

1. Background Reading Material

THE UNITED STATES, OPEC, AND MULTINATIONAL OIL (1977)

Author: Frank R. Wyant
Lexington Books, D. C. Heath and Co. Distribution Center;
2700 North Richardt Ave.; Indianapolis, IN 46219
Price: $18.95 Level: Teacher

This book evaluates the effects of government intervention in the international petroleum industry. The discussion moves from a history of the development of multinational oil corporations to a description of legislation intended to break up large U. S. oil companies.

WE ALMOST LOST DETROIT (1975)

Author: John Fuller
Reader's Digest Press, c/o Thomas Y. Crowell Company;
10 E. 53rd Street; New York, NY 10022
Price: $1.95 Level: 10-12

This book is the true account of a near disaster at a nuclear plant on the outskirts of Detroit. It discusses many of the nuclear safety issues involved in the rush to solve the energy crisis through the use of nuclear fission.

WESTERN COAL: PROMISE OR PROBLEM? (1978)

Authors: Wallace E. Tyner, Robert J. Kalter, with John P. Wold
Lexington Books, D. C. Heath and Co. Distribution Center;
2700 North Richardt Ave.; Indianapolis, IN 46219
Price: Contact source for price information. Level: Teacher

This book covers major issues involved in leasing and developing the vast quantities of federally-owned Western coal. The topics covered include leasing policy, strip mining cost, resource availability, and locations for future coal development.

1. Background Reading Material

WHAT MAKES THINGS WORK--AN ENERGY PRIMER (A Set, 1977)

MacDonald-Raintree, Inc.; 205 W. Highland Avenue;
Milwaukee, WI 53203
Price: $32.35 Level: K-3

In this set of books, various sources of energy are explained in a simple, understandable way for beginning readers. There are seven books in the set: Oil, Wood, Heat, Electricity, Water, In the City, and In the Air.

WHERE ARE YOU GOING WITH THAT COAL? (1978)

Author: Roy Doty with Leonard Marr
Doubleday and Co., Inc.; Sales Office, 501 Franklin Ave.;
Garden City, NY 11530
Price: $5.95 Level: 4-9

Coal is playing an ever-increasing role in supplying energy for millions of people. This illustrated volume shows the various uses of coal in the modern world.

WHERE ARE YOU GOING WITH THAT ENERGY? (1978)

Author: Roy Doty with Leonard Marr
Doubleday and Co., Inc.; Sales Office, 501 Franklin Ave.;
Garden City, NY 11530
Price: $5.95 Level: 4-9

A companion to the preceding volume, this book examines the many energy sources used by humans and highlights the constant search for new sources and uses for energy. Many illustrations are included.

1. Background Reading Material

THE WHITE-COLLAR CHALLENGE TO NUCLEAR SAFEGUARDS (1978)

Authors: Herbert Edelhertz and Marilyn Walsh
Lexington Books, D. C. Heath and Co. Distribution Center;
2700 North Richardt Ave.; Indianapolis, IN 46219
Price: $10.95 Level: Teacher

The authors explore the challenge presented by white-collar employees in the nuclear industry who, using guile or deception as opposed to force, could gain access to nuclear materials. This book is valuable as a source of ideas about the potential dangers and abuses of nuclear energy.

THE WHOLE EARTH ENERGY CRISIS: OUR DWINDLING SOURCES OF ENERGY (1973)

Author: John H. Woodburn
School and Library Dept., G. P. Putnam's Sons;
Coward, McCann, and Geoghegan, Inc.;
Berkley Publishing Corp.; P. O. Box P70;
East Rutherford, NJ 07073
Price: $5.69 Level: 7-12

This book explains the sun's role in supplying direct and indirect energy to the earth and contains information about natural gas, coal, petroleum, and nuclear energy. Social, economic, and political issues are integrated with scientific information.

WIND-CATCHERS: AMERICAN WINDMILLS OF YESTERDAY AND TOMORROW (1976)

Author: Volta Torrey
Stephen Greene Press; Fessenden Road at Indian Flat;
Brattleboro, VT 05301
Price: $12.95 (quantity discount available) Level: 6-12

This book provides a background of windmill development abroad, but the main subject is the story of windmill use in America and a future projection of windmills as energy sources. It includes 36 photographs and describes dozens of American windmills, giving accounts of their design, specifications, and capabilities.

1. Background Reading Material

WIND ENERGY AND YOU (1976)

Author: Robert Griffin
Dynergy Corporation; P. O. Box 428, 1269 Union Avenue;
Laconia, NH 03246
Price: $2.50 Level: 10-12

This is a basic guide to wind-generated electricity. A list of manufacturers and distributors is included.

WIND MACHINES (1975)

Author: Frank R. Eldridge
Natural Power, Inc.; Francestown Turnpike;
New Boston, NH 03070
Price: Contact source for price information. Level: 10-12

This book contains a description of various wind-powered machines. Drawings, photos, and diagrams are included in the material.

WINONA, TOWARDS AN ENERGY CONSERVING COMMUNITY

Publications, WINONA, University of Minnesota;
2818 Como Ave., S. E.; Minneapolis, MN 55414
Price: $5.16 Level: Teacher

This book is the result of a project by architecture students at University of Minnesota to investigate possible ways alternate energy systems and energy-conserving principles could be implemented in a community of 30,000 people. The book contains many ideas for communities and concerned groups interested in energy conservation.

WORLD ENERGY STRATEGIES: FACTS, ISSUES, AND OPTIONS (1975)

Author: Amory Lovins
Ballinger Publishing Co.; 17 Dunster St.
Cambridge, MA 02138
Price: $6.95 Level: Teacher

In this volume Mr. Lovins explores the growing constraints on energy sources that are already inadequate. He proposes options in the form of conservation, life-style modification, and new technology which can provide new, clean sources of energy.

WORLD LANDMARK BOOKS #W-48: THE STORY OF ATOMIC ENERGY (1964)

Author: Laura Fermi
American Printing House for the Blind; 1839 Frankfort;
Louisville, KY 40206
Price: $7.95 Level: Special Education 5-9

This braille book describes the atom, its power, and the evolution of the scientific study of its nature. It presents modern views on atomic energy and examines the possibilities for using atomic power.

THE WORLD PETROLEUM MARKET (1973)

Author: M. A. Adelman
Resources for the Future; 1755 Massachusetts Ave., N. W.;
Washington, D. C. 20036
Price: $5.95 Level: 10-12

This is a detailed 20-year history of the financial arrangements within the international oil industry regarding the price of crude oil. It provides a basis for understanding the past behavior of oil prices and for assessing future prospects based on an analysis of underlying fundamentals of oil production and transportation costs, industry structure, and public policy in both importing and exporting countries.

1. Background Reading Material

THE WORLD PRICE OF OIL: A MEDIUM TERM ANALYSIS (1976)

Author: Hendrik Houthakker
American Enterprise Institute for Public Policy Research;
1150 Seventeenth St., N. W.; Washington, D. C. 20036
Price: $2.50 Level: Teacher

In this study, Houthakker examines the projected 1980-85 impact of the 1974 OPEC crude oil price increase. He concludes that the real price of oil is likely to increase, even under the best of conditions, unless the consuming nations take countermeasures.

2. Project Guides

ALTERNATIVE NATURAL ENERGY SOURCES IN BUILDING DESIGN (1974)

Authors: A. J. Davis and R. P. Schubert
Van Nostrand Reinhold Co., Division of Litton Educational Publishing, Inc.; 450 W. 33rd St.; New York, NY 10001
Price: $6.95 Level: 10-12

This book provides designs for utilizing alternative energy sources in building homes and providing the essentials for living. Science projects for home or classroom may be distilled from the ideas presented.

AN ATTACHED SOLAR GREENHOUSE (1976)

Authors: William and Susan Yanda
The Lightning Tree; P. O. Box 1837; Santa Fe, NM 87501
Price: $2.00 Level: 7-12
(quantity discount available)

This book, written in both Spanish and English, provides simple, step-by-step instructions for building an attached, passive solar greenhouse that will help provide heat in the winter and cooling in the summer. The minimal investment required makes such a project feasible for many schools.

BECOMING AN ENVIRONMENTALIST OR, HOW I LEARNED TO STOP WORRYING AND LOVE THE ENERGY CRISIS (1976)

Author: Barbara Clark
Cottonwood Publishing Co.; Walla Walla, WA 99362
Price: $3.00 Level: 4-12

Many ideas for home projects are available in this booklet. It is the account of one family's reaction to the energy crisis, including a look at their energy and food consuming habits, possible energy waste, and the measures taken to minimize energy use.

2. Project Guides

BOOK OF SUCCESSFUL FIREPLACES (1977)

Authors: R. J. Lytle and Marie-Jeanne Lytle
Structures Publishing Co.; P. O. Box 423;
Farmington, MI 48024
Price: $5.95 Level: 10-12

A well-designed fireplace can save money on home heating bills in the winter. This book tells how to design and install fireplaces and wood-burning stoves.

BUILD-IT BOOK OF SOLAR HEATING PROJECTS (1977)

Author: William M. Foster
Tab Books; P. O. Box 40; Blue Ridge Summit, PA 17214
Price: $4.95 Level: 10-12

This is a guide to planning, designing, building, and installing a solar heating system. The book basically deals with large scale solar systems, but might be used in the classroom as a reference to various climatological and topographical factors that need to be considered in any successful solar installation.

BUILD YOUR OWN SOLAR WATER HEATER (1976)

Authors: William Barada, William Partington, Douglas Root
Environmental Information Center; 935 Orange Ave.;
Winter Park, FL 32789
Price: $2.50 Level: 7-12

This booklet contains complete and detailed directions for constructing a solar water heater. No special skills are required, and the materials needed are readily available in most areas.

BUILD YOUR OWN SOLAR WATER HEATER (1978)

Author: Stu Campbell with Doug Taff
Garden Way Publishing; Charlotte, VT 05445
Price: $7.95 Level: 10-12

This book deals with the fundamentals of building and installing a practical home solar water heater. It is written in nontechnical language and is suitable for projects in science or vocational arts classes.

2. Project Guides

BUILDING FOR SELF-SUFFICIENCY (1977)

Author: Robin Clarke
Universe Books; 381 Park Ave., South; New York, NY 10016
Price: $5.95 Level: 10-12

Building for Self-Sufficiency gives practical, first-hand information on how to use alternative methods for fulfilling basic needs, with an emphasis on alternative energy sources. While the book is suited for informal reading and study, many of the ideas might serve as a basis for science or vocational arts projects.

THE COMPLETE BOOK OF HEATING WITH WOOD (1974)

Author: Larry Gay
Garden Way Publishing; Charlotte, VT 05445
Price: $3.95 Level: 10-12

This book advocates the use of wood as an efficient, environmentally safe fuel for home heating and other domestic uses. The classification of local varieties of wood by heating efficiency is a project clearly outlined in the text.

THE COMPLETE ENERGY-SAVING HOME IMPROVEMENT GUIDE (1978)

Author: James W. Morrison
Arco Publishing Co.; 219 Park Ave., South;
New York, NY 10003
Price: $2.95 Level: 10-12

In explaining how to safeguard the home and pocketbook from excessive expenses for heating and air-conditioning, this book describes how to conduct a home energy survey, how to calculate heat loss, and what steps to take to properly winterize a dwelling. Included are do-it-yourself projects such as setting up a coal or wood stove, installing a fireplace, and information on the possibilities of using solar energy.

2. Project Guides

CONSERVATION OF ENERGY (1978)

Author: Jane Werner Watson
Franklin Watts, Inc.; 730 Fifth Ave.; New York, 10019
Price: $4.90 Level: 4-9

After a brief discussion of current and future energy sources, this illustrated guide concentrates on how energy can be conserved today--in transportation and industry, in cities and on farms. A separate chapter deals with practical things young readers themselves can do.

CONSUMER HANDBOOK OF SOLAR ENERGY (1978)

Author: John H. Keyes
Morgan and Morgan, Inc.; 145 Palisade St.;
Dobbs Ferry, NY 10522
Price: $7.95 Level: 10-12

This book is designed to provide potential buyers of solar furnaces with up-to-date information concerning the suitability of particular solar units for individual needs. The book can be used for projects in an educational setting, since it contains specifications, calculations, and other home applications.

CREATING ENERGY (1978)

Author: David A Wilson
Lorien House; P. O. Box 1112; Black Mountain, NC 28711
Price: $5.00 Level: 7-12

Creating Energy is a book of alternative energy projects, including a 12-volt solar cell system, steam-generating and concentrating collectors, and a solar furnace. Complete plans are included for each project.

2. Project Guides

DESIGN FOR A LIMITED PLANET (1976)

Authors: Norma Skurka and Jon Narr
Centerline Co.; 401 S. 36th St.; Phoenix, AZ 85034
Price: $7.45 Level: 10-12

This book contains up-to-date information on alternative energy houses. Conservation and simpler lifestyles are advocated.

DESIGNING AND BUILDING A SOLAR HOUSE: YOUR PLACE IN THE SUN (1976)

Author: Donald Watson
Garden Way Publishing; Charlotte, VT 05445
Price: $8.95 Level: 10-12

Mr. Watson's book clearly demonstrates the most sensible ways to match good house design and contemporary solar heating technology. It is suitable for use in science or drafting/design classes as a source of special projects in conservation and new architecture and technology.

DO-IT-YOURSELFER'S GUIDE TO MODERN ENERGY-EFFICIENT HEATING AND COOLING SYSTEMS (1977)

Author: John E. Traister
Tab Books; P. O. Box 40; Blue Ridge Summit, PA 17214
Price: $5.95 Level: 10-12

This guide covers a wide range of modern heating and cooling systems and shows how to choose, install, maintain, and repair each system. There are many practical hints on how to make the best use of one's utility dollar.

ELECTRIC VEHICLES, DESIGN AND BUILD YOUR OWN (1977)

Author: Michael Hacklemen
Earthmind/Peace Press; 3828 Willat Ave.;
Culver City, CA 90230
Price: $7.95 Level: 10-12

This is a step-by-step introduction to the principles involved in constructing an electrical vehicle. The simple approach would make it possible to use the book as a guide for projects in science or vocational technology classes.

2. Project Guides

ENERGY (1978)

Boy Scouts of America (Contact local office of the Boy Scouts of America.)
Price: $ .55 Level: 6-12

The Energy merit badge pamphlet includes projects and provides a simple treatment of our energy problems. Aspects of energy covered include sources, supplies, and conservation of energy.

THE ENERGY BOOM (1976)

Author: Ronald J. Gramm
Time-Wise Publications; P. O. Box 4140; Pasadena, CA 91106
Price: $10.50 Level: 11-12

This is a book of information about possible solutions to the energy crisis: how to generate your own power, how to use solar energy, and how to apply common sense thinking to energy issues. The book, written in simple language and illustrated with photos and drawings, is aimed at homeowners, builders, educators, students, and others interested in solar heating and energy conservation.

ENERGY CONSERVATION STANDARDS (1978)

Authors: Fred S. Dubin and Chalmers G. Long, Jr.
McGraw-Hill Book Co., Order Services; Manchester Road; Manchester, MO 63011
Price: $22.50 Level: 10-12

This manual discusses energy conservation in existing buildings and in new buildings. Topics covered include operation and maintenance, modification of existing systems and buildings, and design of new buildings.

ENERGY EDUCATION AND CONSERVATION

Boy Scouts of America (Contact local office of the Boy Scouts of America.)
Price: free Level: 7-12

This is a project kit containing various experiments, activities, and objectives regarding energy and conservation. All activities require only simple, readily available materials.

2. Project Guides

THE ENERGY MISER'S MANUAL (Revised 1976)

Author: William Morrell
Environmental Action Reprint Service; Box 545;
La Veta, CO 81055
Price: $1.95 Level: 7-12

With statistics and diagrams, Morrell describes a wide range of actions that bring about considerable savings in home energy consumption. He emphasizes do-it-yourself projects, such as building window box solar collectors, turning off stove pilot lights, and taking steps to reduce the fuel demands of the auto.

ENERGY SAVINGS THROUGH AUTOMATIC THERMOSTAT CONTROLS (1979)

U. S. Department of Energy, Technical Information Center;
P. O. Box 62; Oak Ridge, TN 37830
Price: free Level: 7-12

This pamphlet describes two types of devices that can automatically set a thermostat back. Charts on possible energy savings are included.

EXPERIMENTS WITH SOLAR ENERGY (1969)

Author: D. S. Halacy
Grosset and Dunlap, Inc., Publishers; 51 Madison Ave.;
New York, NY 10010
Price: $4.59 Level: 7-12

Forty inexpensive experiments are included in this study of solar energy, its applications, and its potential for the future. There are also photographs, diagrams, a bibliography, and an index.

2. Project Guides

THE FAMILY HANDYMAN PRACTICAL BOOK OF SAVING HOME ENERGY (1978)

Tab Books; P. O. Box 40; Blue Ridge Summit, PA 17214
Price: $5.95 Level: 10-12

This workbook/manual helps the student make choices for home energy efficiency and shows how to implement an energy-saving program. The book contains simple projects with step-by-step instructions, trouble-shooting and repair data, illustrations, and easy-to-read charts and diagrams.

547 EASY WAYS TO SAVE ENERGY IN YOUR HOME (1978)

Author: Roger Albright
Garden Way Publishing; Charlotte, VT 05445
Price: $4.95 Level: 7-12

This book illustrates simple ways to cut home energy costs. Many of the ideas could be adapted for outside projects in various subject areas, including science, math, home economics, and vocational arts.

THE FOOD AND HEAT PRODUCING SOLAR GREENHOUSE (1976)

Authors: Rick Fisher and Bill Yanda
Total Environmental Action, Inc; Church Hill;
Harrisville, NH 03450
Price: $6.00 Level: 10-12

This book describes how to build and maintain a number of solar greenhouses which will provide not only food but also a substantial portion of the heat needed for a dwelling. The ideas contained are adaptable to a large-scale secondary level science project.

2. Project Guides

THE FUEL SAVERS (1978)

Authors: Dan Scully, Don Prowler, Bruce Anderson
Brick House Publishing Co.; Church Hill;
Harrisville, NH 03450
Price: $2.75 Level: 7-12

The Fuel Savers is a kit of solar ideas for use in existing homes. It helps explain what solar energy is and offers many ideas for cutting fuel bills--ideas that can be accomplished with simple, ordinary tools and materials.

THE GARBAGE BOOK (1977)

Conservation Books; P. O. Box 3500, Station C;
Ottawa, K1X 4G1, Canada
Price: Contact source for price information. Level: 10-12

An important facet of energy conservation is the reuse of those things that require energy to produce. This book is a basic guide to cutting waste, recycling, and stretching the use of everyday products.

GAS MILEAGE GUIDE FOR NEW CAR BUYERS (1979)

U. S. Department of Energy, Technical Information Center;
P. O. Box 62; Oak Ridge, TN 37830
Price: free Level: 10-12

This 36-page booklet lists the estimated fuel economy potential of 1978 cars and light-duty trucks and the engine combustion designs that meet emission standards of all states. A California version is also available which evaluates new models on the basis of stringent California standards.

2. Project Guides

THE HANDBOOK OF MOVING AIR

Editor: Harrison A. Dunlavy
American Ventilation Association; P. O. Box 7464;
Houston, TX 77008
Price: $2.00 Level: 10-12

The Handbook of Moving Air describes the energy-saving benefits of proper ventilation. Methods to increase ventilation efficiency are described, providing ideas for home projects for science students.

HANDMADE HOT WATER SYSTEMS (1978)

Authors: Art Sussman and Richard Frazier
Garcia River Press; P. O. Box 527; Point Arena, CA 95468
Price: $4.95 Level: 10-12

This book uses simple language to describe how individuals can provide their own hot water using wood or solar heat with systems built using available materials and common tools. Such projects would be suited to vocational arts or science classes.

HARNESSING WATER POWER FOR HOME ENERGY (1978)

Author: Dermot McGuigan
Garden Way Publishing; Charlotte, Vt 05445
Price: $4.95 Level: 10-12

This is a sourcebook which tells how to tap the power of a small stream or river for home electrical needs. Concepts presented might be the basis for special projects for individuals or a science class studying alternative energy sources for the home.

2. Project Guides

HEATING YOUR HOME WITH WOOD (1978)

Author: Neil Soderstrom
Times Mirror Magazines, Book Division; 380 Madison Ave.;
New York, NY 10017
Price: $3.95 Level: 10-12

This book presents the necessary information for utilizing various types of wood-burning installations to heat the home. Written in everyday language, it points up the important economic advantages as well as some of the pleasures involved in using wood as a fuel.

HOME ENERGY HOW-TO (1977)

Author: A. J. Hand
Times Mirror Magazines, Book Division; 380 Madison Ave.;
New York, NY 10017
Price: $9.95 Level: 10-12

Using clear explanations and step-by-step instructions, this book is a comprehensive guide to the production of home energy from alternative sources. There are ideas for many types of classroom and home projects.

THE HOME ENERGY SAVER (1977)

Author: Irene Cumming Kleeberg
Butterick Publishing Co.; 161 Avenue of the Americas;
New York, NY 10013
Price: $3.95 Level: 10-12

This is a basic guide to home energy conservation. It covers heating, cooling, the automobile, appliances, and contains a glossary of energy terms.

2. Project Guides

HOME ENERGY SAVERS' WORKBOOK (1976)

Superintendent of Documents; U. S. Government Printing Office; Washington, D. C. 20402
Price: $ .35 each Level: 7-12
(minimum charge $1.00 per mail order)

This workbook/guide shows steps which can be taken to reduce home energy costs. Emphasis is on those techniques that are most cost-effective.

HOME GUIDE TO SOLAR HEATING AND COOLING (1978)

Author: Jackson Hand
Times Mirror Magazines, Book Division; 380 Madison Ave.; New York, NY 10017
Price: $3.95 Level: 10-12

This book explains the practical principles of solar energy utilization, with emphasis on how an individual can design and construct his own system. It is written with the layperson in mind.

HOMEGROWN SUNDWELLINGS (1977)

Author: Peter Van Dresser
The Lightning Tree; P. O. Box 1837; Santa Fe, NM 87501
Price: $5.95 Level: 10-12
(quantity discount available)

This book discusses the application of solar energy through low technology systems that do not require factory-made equipment or materials. The language is simple, and there are illustrations and appendices which note the applications of the design ideas illustrated.

2. Project Guides

THE HOMEOWNER'S ENERGY GUIDE: HOW TO BEAT THE HEATING GAME (1976)

Author: John A. Murphy
Thomas Y. Crowell Co.; 10 E. 53rd St.; New York, NY 10023
Price: $9.95 Level: 10-12

This book provides practical methods for reducing heating costs through proper construction, insulation, and equipment selection. The simple approach used would be valuable for students wishing to do home projects on energy cost reduction.

HOMEOWNER'S GUIDE TO SAVING ENERGY (1976)

Authors: Billy and Jim Price
Tab Books; P. O. Box 40; Blue Ridge Summit, PA 17214
Price: $5.95 Level: 10-12

This guide shows how to reduce heating and cooling costs, gives practical, cost-cutting tips on lighting and home appliances, and identifies ways energy is often wasted. Following the suggestions could result in a one-third reduction of electric consumption in the home.

HOMEOWNER'S GUIDE TO SOLAR HEATING AND COOLING (1976)

Author: William M. Foster
Tab Books; P. O. Box 40; Blue Ridge Summit, PA 17214
Price: $4.95 Level: 10-12

The components of a typical solar heating and cooling system are fully explained in this guide. Photographs, schematic diagrams, and charts illustrate the entire process of acquiring and maintaining a solar energy system.

HOW TO BUILD A SOLAR HEATER (1978)

Author: Ted Lucas
Centerline Co.; 401 S. 36th St.; Phoenix, AZ 85034
Price: $5.45 Level: 10-12

This is a guide to buying and building a solar heater. Group projects in science or vocational arts can be developed from ideas presented.

2. Project Guides

HOW TO CUT YOUR ENERGY BILLS (1976)

Authors: Ronald Derven and Carol Nichols
Structures Publishing Co.; P. O. Box 423;
Farmington, MI 48024
Price: $4.95 Level: 10-12

This book tells how to economize in numerous ways in the use of gas, oil, electricity, and water and shows how to get maximum efficiency from appliances. It is a good source of ideas for science, home economics, or math projects.

HOW TO IMPROVE THE EFFICIENCY OF YOUR OIL-FIRED FURNACE (1978)

U. S. Department of Energy, Technical Information Center;
P. O. Box 62; Oak Ridge, TN 37830
Price: free Level: 10-12

This publication tells how to save money and reduce pollution by having oil-fired heating systems serviced regularly. The booklet is short and nontechnical.

HOW TO SAVE GASOLINE AND MONEY (1979)

U. S. Department of Energy, Office of Public Affairs;
Washington, D. C. 20585
Price: free Level: 10-12

This pamphlet, an excellent source of home projects, outlines ways to conserve gasoline. Projected savings for each suggestion are included.

HOW TO USE SOLAR ENERGY (1978)

Author: Ted Lucas
Crown Publishers, Inc.; One Park Avenue;
New York, NY 10016
Price: $7.95 Level: 7-12

This book illustrates ways to use solar energy to cut utility bills. It was written with the layperson in mind.

2. Project Guides

HOW TO USE SOLAR ENERGY IN YOUR HOME AND BUSINESS (1977)

Author: Ted Lucas
Centerline Co.; 401 S. 36th St.; Phoenix, AZ 85034
Price: $8.45 Level: 10-12

This book contains simple, practical tips for the homeowner, apartment owner or dweller, or business owner to use the sun for energy needs. Students can use the suggestions in home or classroom projects.

ILLUSTRATED SOLAR ENERGY GUIDE OF FLAT-PLATE COLLECTORS FOR PRACTICAL HOME APPLICATIONS

Centerline Co.; 401 S. 36th St.; Phoenix, AZ 85034
Price: $3.20 Level: 10-12

This guide contains 18 diagrams which illustrate the basic principles of solar energy collection. The nontechnical language helps the student design and build a workable unit for collecting and using solar energy.

IN THE BANK . . . OR UP THE CHIMNEY? (1976)

Chilton Book Co.; Radnor, PA 19089
Price: $1.95 Level: 9-12

This booklet is full of tips for saving energy and money through simple home improvements. An energy checklist helps pinpoint trouble areas in the home, and step-by-step instructions are included for desired home improvements with information on needed equipment and tools.

INSULATE YOUR WATER HEATER AND SAVE FUEL (1978)

U. S. Department of Energy, Technical Information Center;
P. O. Box 62; Oak Ridge, TN 37830
Price: free Level: 10-12

This pamphlet describes an inexpensive kit that insulates a home water heater. Estimates on the savings that could result are included.

2. Project Guides

INTRODUCTION TO APPROPRIATE TECHNOLOGY: TOWARD A SIMPLER LIFESTYLE (1977)

Editor: R. J. Congdon
Rodale Press; 33 E. Minor St.; Emmaus, PA 18049
Price: $6.95 Level: 10-12

This is a guidebook to the ideas and tools that can lead to a simpler lifestyle for effectively dealing with current energy-environment issues. Many ideas presented are applicable to classroom units on energy conservation and alternatives for fuel and life support.

KEEPING THE HEAT IN (1979)

Stephen Greene Press; Fessenden Road at Indian Flat;
Brattleboro, VT 05301
Price: $4.95 Level: 6-12
(quantity discount available)

This book provides basics on home-building procedures for conservation of energy through use of insulation and moisture control techniques and explains how heat is transferred, what "R" value is, and how to caulk. Diagrams show how to insulate a house and describe various insulating materials.

LIVING FOR THE FUTURE: PERSONAL ACTIONS TO CONSERVE NONRENEWABLE RESOURCES FOR FUTURE GENERATIONS (1976)

Author: W. J. Ralls
Exposition Press, Inc.; 900 S. Oyster Bay Rd.;
Hicksville, NY 11801
Price: $4.50 Level: 10-12

This is an informative, practical guide to conserving energy and preserving natural resources. It leads to the conclusion that solar energy will be a major energy source in the future.

2. Project Guides

MAKE YOUR OWN ALTERNATIVE ENERGY (1979)

Author: Richard Cummings
David McKay Company, Inc.; 2 Park Avenue;
New York, NY 10016
Price: $8.95 Level: 7-12

In this guide for making alternative energy systems Cummings fully explains the future role of alternative energy. Included are instructions and diagrams for making many projects and models--an instant solar collector, solar greenhouse, waterwheel rock tumbler, wind gauge, sawdust stove, and a tabletop methane digester.

MAKE YOUR OWN ELECTRICITY (1977)

Author: Terence McLaughlin
David and Charles, Inc.; Box 57; North Pomfret, VT 05053
Price: $7.50 Level: 10-12
(quantity discount available)

This book includes instructions on selecting, constructing, installing, and maintaining a small electrical system. It outlines equipment that can be made or bought, ranging from engine-powered generators to homemade windmills or solar panels.

METHANOL AND OTHER WAYS AROUND THE GAS PUMP (1976)

Author: John Ware Lincoln
Garden Way Publishing; Charlotte, VT 05445
Price: $4.95 Level: 10-12

This book presents a number of ideas for alternative fuels for automobile engines. Many vocational arts or science projects could be developed from the ideas presented.

2. Project Guides

MORSØ WOOD HEAT HANDBOOK (1977)

Author: Lee Dora Gilchrist
Southport Stoves; 959 Main Street; Stratford, CT 06497
Price: $1.00 Level: 10-12
(quantity discount available)

This handbook explains principles of wood-burning, stove construction and installation, proper usage, chimney types and provides a comparison of wood types. The booklet could be a source of projects dealing with costs of alternative methods of home heating.

100 WAYS TO SAVE ENERGY AND MONEY IN THE HOME (1975)

Conservation Books; P. O. Box 3500, Station C;
Ottawa, K1X 4G1, Canada
Price: Contact source for price information. Level: 10-12

This book concentrates on how to save energy through proper insulation and heating practices. Many other energy-saving opportunities in the home are also described.

150 WAYS TO SAVE ENERGY AND MONEY (1977)

Editor: Vi Bradley Felton
Pilot Books; 347 Fifth Ave.; New York, NY 10016
Price: $2.50 Level: 10-12

This guide shows practical, easy ways to reduce energy consumption and save money in and around the home and in the car. Many outside projects can be adapted from ideas in the book.

OUR ENERGY: PROBLEMS AND SOLUTIONS (1977)

Energy Conservation Research; 9 Birch Rd.;
Malvern, PA 19355
Price: $1.00 Level: 7-12
(quantity discount available)

The purpose of this booklet is to show many ways of eliminating wasteful uses of energy. Illustrations and graphs are included.

2. Project Guides

PASSIVE SOLAR WATER HEATER

Author: H. W. McCracken
Centerline Co.; 401 S. 36th St.; Phoenix, AZ 85034
Price: $6.00 Level: 10-12

This book is designed to enable the student or layperson to build and install a solar water heater. Plans, photographs, instructions, and data are included.

PEDAL POWER IN WORK, LEISURE, AND TRANSPORTATION (1977)

Editor: James C. McCullagh
Rodale Press; 33 E. Minor St.; Emmaus, PA 18049
Price: $4.95 Level: 10-12

Pedal Power, a new look at the future of the bicycle in appropriate technology, demonstrates the potential of simple, pedal-driven devices to accomplish a multitude of daily tasks in the workshop, kitchen, or on the farm. Drawings, photos, and instructions make this a valuable source of projects.

PROVIDER GREENHOUSE

Helion, Inc.; Box 445; Brownsville, CA 95919
Price: $10.00 Level: 10-12

Complete construction plans for a greenhouse which will allow year-round plant growth are provided. The completed structure requires little or no energy other than direct solar radiation for heating and natural convective air currents for cooling and venting.

A RESOURCE BOOK ON THE ART OF HEATING WITH WOOD (1978)

Kristia Associates; 343 Forest Ave.; Portland, ME 04104
Price: $1.00 Level: 10-12

This brochure provides general information about wood as a fuel. Topics covered in this fully-illustrated, hand-lettered brochure include woodstove installations and the varying qualities of cast iron.

2. Project Guides

SAVING HOME ENERGY (Revised 1978)

Author: Richard V. Nunn
Oxmoor House, Inc.; Box 2563; Birmingham, AL 35202
Price: $2.95 Level: 6-12
(quantity discount available)

This book contains over 300 ideas for conserving energy, cutting costs, and increasing efficiency in the home. Included is an energy-saving checklist and a section featuring the technology of solar heat.

THE SAWDUST STOVE

Author: Bill White
The Firebuilders; 352 Stetson Rd.; Brooklyn, CT 06234
Price: $1.50 Level: 10-12

With many drawings and photographs, this booklet shows how to build a double drum stove that can heat a garage or workshop with small quantities of sawdust. The heater is an easy project that can be built at very low cost.

SIMPLIFIED WIND POWER SYSTEMS FOR EXPERIMENTERS (1975)

Author: Jack Park
Helion, Inc.; Box 445; Brownsville, CA 95919
Price: $6.00 Level: 10-12

Though somewhat technical, this manual might serve as a source for projects for an accelerated science class. It contains all necessary information, charts, tables, and diagrams to construct a small wind-powered electrical generator.

THE SKYLIGHT BOOK (1976)

Author: Al Burns
Running Press; 38 S. 19th St.; Philadelphia, PA 19103
Price: $5.95 Level: 10-12

Skylights are sources of natural light and heat, and hence, can be used to save energy. This book includes instructions and plans for building and installing skylights, a materials source list, an annotated bibliography, and a glossary.

2. Project Guides

THE SOLAR COOKBOOK (1978)

Author: Stella Andrassy
Morgan and Morgan Inc.; 145 Palisade St.;
Dobbs Ferry, NY 10522
Price: $3.95 Level: 10-12

The Solar Cookbook contains nearly 100 recipes through which the author demonstrates that a completely balanced diet may be served using only solar energy as fuel. The recipes range from fruit desserts to sun-cooked pasta dishes, all designed to be cooked in a portable solar oven.

SOLAR COOKERY (1978)

Authors: Dan and Beth Halacy
Peace Press; 3828 Willat Ave.; Culver City, CA 90230
Price: $6.95 Level: 10-12

This book describes in detail how to make inexpensive solar ovens and hotplates. It covers the basic principles of solar energy and includes a comprehensive recipe section.

SOLAR ENERGIZED FOOD DEHYDRATOR

Centerline Co.; 401 S. 36th St.; Phoenix, AZ 85034
Price: $6.50 Level: 10-12

This book gives complete details for building a home solar food dehydrator. Instructions are simple and appropriate for vocational education or science students.

SOLAR ENERGY (Two books: First Book, 1968; Impact 1978)

Author: John Hoke
Franklin Watts, Inc.; 730 Fifth Ave.; New York, NY 10019
Price: $4.90 (each book) Level: 4-6 (1968 book)
7-12 (1978 book)

These illustrated books explain what solar energy is, how nature uses it, how people use it, and include experiments that can be done by individual readers at home or as classroom projects. A materials list provides sources and, where possible, costs for supplies and/or kits for the projects.

2. Project Guides

THE SOLAR ENERGY NOTEBOOK (1976)

Authors: W. H. Rankins, III, and David A. Wilson
Lorien House; P. O. Box 1112; Black Mountain, NC 28711
Price: $4.00 Level: 10-12

The Solar Energy Notebook gives complete, step-by-step information for calculating solar needs, plus climatic data and maps for North America. It is suitable as a source of projects for secondary science classes.

SOLAR FOOD DRYER BOOK (1978)

Author: Stella Andrassy
Morgan and Morgan, Inc.; 145 Palisade St.;
Dobbs Ferry, NY 10522
Price: $3.95 Level: 10-12

In this book, the author demonstrates that home-drying of foods is not only easy and practical, but also a great way to save money. Included in the book are plans for a backyard or patio food dryer which can be built out of the simplest of materials and costs very little.

SOLAR HEATED BUILDINGS OF NORTH AMERICA (1978)

Author: William Shurcliff
Brick House Publishing Co.; Church Hill;
Harrisville, NH 03450
Price: $8.95 Level: 10-12

This book gives concise descriptions of outstanding solar designs of North America, including photographs, perspective sketches, and costs. Secondary design, drafting, and science students should benefit from the nontechnical approach and from projects that might grow from the book.

2. Project Guides

THE SOLAR HOME BOOK (1976)

Author: Bruce Anderson with Michael Riordan
Brick House Publishing Co.; Church Hill;
Harrisville, NH 03450
Price: $8.50 Level: 10-12

The Solar Home Book would be a valuable aid as a source of projects and ideas for secondary drafting, design, and science classes. It describes many different approaches to the design of solar dwellings and provides necessary accompanying data.

SOLAR HOMES AND SUN HEATING (1976)

Author: George Daniels
Harper and Row Publishers, Inc; 10 E. 53rd St.;
New York, NY 10022
Price: $9.95 Level: 10-12

This is a how-to book on building solar homes and adding solar power installations to existing homes. Written in nontechnical language, it contains much practical information.

SOLAR SCIENCE PROJECTS (1972)

Author: D. S. Halacy, Jr.
Centerline Co.; 401 S. 36th St.; Phoenix, AZ 85034
Price: $3.00 Level: 7-12

These projects illustrate how to harness direct energy from the sun with easily built science projects. Included are plans for a cooker, oven, water heater, water distiller, radio, motor, and furnace.

SOLAR WATER HEATER WORKSHOP MANUAL (1978)

Author: Ken Eklund, et al.
Ecotope Group; 2332 E. Madison; Seattle, WA 98112
Price: $5.00 Level: 10-12

This is a step-by-step instruction manual for the construction of a thermo-siphon solar hot water system. It includes a complete list of tools and materials needed for construction and provides guidelines for producing a "hands-on" learning experience.

2. Project Guides

30 ENERGY-EFFICIENT HOUSES YOU CAN BUILD (1977)

Authors: Alex Wade and Neal Ewenstein
Rodale Press; 33 E. Minor St.; Emmaus, PA 18049
Price: $8.95 Level: 10-12

This book offers a thorough look at practical dwelling design concepts that save energy and utilize alternative energy sources and low-cost, recycled materials. Many home or classroom projects could be developed from the ideas presented.

TIPS FOR ENERGY SAVERS (1978)

U. S. Department of Energy, Technical Information Center;
P. O. Box 62; Oak Ridge, TN 37830
Price: free Level: 4-12

This booklet offers practical advice on how to conserve energy in and around the home. An energy consumption chart for home appliances is included.

200 WAYS TO SAVE ON ENERGY IN THE HOME--AND STILL BE COMFORTABLE (1978)

Author: George B. Roscoe
Acropolis Books; 2400 17th St., N. W.;
Washington, D. C. 20009
Price: $4.95 Level: 7-12

Complete with easy-to-follow instructions, this book provides a total energy saving system that could drastically cut home energy bills while permitting the family to remain comfortable. Suggestions in the book might be adapted for home or classroom projects for students.

WINDMILL: 12/16 CONSTRUCTION PLANS

Helion, Inc.; Box 445; Brownsville, CA 95919
Price: $10.00 Level: 10-12

Plans for construction of a complete 2,000 to 5,000 watt generator which uses aluminum blades, belt drive transmission, and an overspeed governor are provided by Helion. Plans for a tower are not included.

2. Project Guides

WOOD HEATING HANDBOOK (1977)

Author: Charles Self
Tab Books; P. O. Box 40; Blue Ridge Summit, PA 17214
Price: $5.95 Level: 10-12

This handbook explains how to select, install, use, and maintain fireplaces and woodstoves. The easy-to-read volume gives information needed to build an all-masonry fireplace, install a woodstove, and improve the efficiency of an existing fireplace.

THE WOODBURNER'S ENCYCLOPEDIA

Author: Jay W. Shelton
Total Environmental Action, Inc.; Church Hill;
Harrisville, NH 03450
Price: $6.95 Level: 10-12

This is a valuable sourcebook on the theory, practice, and equipment relating to wood as an energy source. It includes a glossary, an illustrated catalog of equipment, the relative heat value of various woods, and information on the energy-efficiency of burners and fireplaces.

YOUR ENERGY-EFFICIENT HOUSE (1975)

Author: Anthony Adams
Garden Way Publishing; Charlotte, VT 05445
Price: $4.95 Level: 10-12

In this book, Mr. Adams provides numerous ideas which allow the builder or remodeler to take advantage of natural forces (sun, wind, etc.) in order to reduce energy consumption in the home. The book would be useful in design/drafting, science, and vocational arts classes for projects or independent study.

3. Instructional Material

AGRICULTURE, ENERGY, AND SOCIETY (1977)

U. S. Department of Energy, Technical Information Center;
P. O. Box 62; Oak Ridge, TN 37830
Price: free Level: 10-12

This interdisciplinary unit helps students examine the nature of present-day agricultural methods. The impact of these agricultural methods on existing energy resources is stressed.

BRINGING ENERGY TO THE PEOPLE: WASHINGTON, D. C. AND GHANA (1978)

U. S. Department of Energy, Technical Information Center;
P. O. Box 62; Oak Ridge, TN 37830
Price: free Level: 6-7

This unit, through a look at two very different cultures, establishes two concepts: that energy is a basic need in all cultures, and that energy use affects the way people live. An interdisciplinary approach is used to increase classroom utility.

COMMUNITY WORKERS AND THE ENERGY THEY USE (1977)

U. S. Department of Energy, Technical Information Center;
P. O. Box 62; Oak Ridge, TN 37830
Price: free Level: 2

In units such as "What Is Energy", students explore the energy forms of light, heat, and motion. In "Community Workers Who Work Directly with the Sources of Energy", students look at the farmer, grocer, oil man, gasoline station attendant, and others.

3. Instructional Material

CONSUMER USE OF ENERGY (1978)

Kansas Vocational Curriculum Center; P. O. Box 60,
Room 115 Willard Hall, Pittsburg State University;
Pittsburg, KS 66762

Price:	Contact source for price information.	Level:	10-12

This 20-unit curriculum guide explains the use and conservation of the many sources of energy on our planet. All facets of energy are explored, from alternate energy systems to the political aspects of energy consumption.

DRESSING FOR ENERGY CONSERVATION (1979)

Authors: Mary Webb, David Chesebrough, Emmanual Sillman, teachers from Energy Workshops
Conservation Consultants; 417 Thorne St.; Sewickley, PA 15143

Price:	$1.00	Level:	K, Special Ed.

This activity stresses the need to wear proper clothing as we adjust to cooler houses in the winter and warmer houses in the summer. The main idea is the potential for saving energy through responsible personal action.

AN EDUCATOR'S GUIDE TO THE THREE E'S: ENERGY/ECOLOGY/ECONOMICS (1978-1979)

Author: Sally R. Campbell
Association Films; 512 Burlington Ave.; La Grange, IL 60525

Price:	free	Level:	K-12

This curriculum guide is intended to help students investigate various aspects of the energy problem and explore alternative solutions. The guide introduces basic concepts on energy, ecology, and economics, and promotes constructive changes in attitude and behavior in dealing with the energy challenge.

3. Instructional Material

ENERGY AND CONSERVATION EDUCATION ACTIVITIES FOR THE CLASSROOM (1977)

Energy and Man's Environment; 0224 S. W. Hamilton, Suite 301;
Portland, OR 97201
Price: $24.00 (each notebook) Level: 1-3, 4-6,
$86.40 (complete set) 7-9, 10-12

This set of resource materials contains more than 250 teacher-developed, classroom-tested lesson plans for all grades and subject areas. Each lesson plan contains complete content and process information to ensure easy and appropriate classroom implementation.

ENERGY AND ORDER (1976)

Authors: Mark Terry and Paul Witt
Environmental Action Reprint Service; Box 545;
La Veta, CO 81055
Price: $3.00 Level: 10-12

This teacher handbook outlines activities that form a complete unit on energy: what it is, how it works, how it is connected with food and transportation. Simple experiments develop concepts of thermodynamics, entropy, and energy intensiveness.

ENERGY AND SOCIETY: INVESTIGATIONS IN DECISION MAKING (1977)

Hubbard; P. O. Box 104; Northbrook, IL 60062
Price: $85.00 (complete unit) Level: 10-12
Additional copies of student
handbook: $3.95 each or 10 for $35.00

This multimedia unit, designed to be used over a 9-12 week period, contains an instructor's manual, a student handbook, slides, study guides, a film loop, and a game. Its purpose is to help students explore the consequences of energy decisions and to introduce them to the complex issues involved in the current energy dilemma.

3. Instructional Material

ENERGY AND TRANSPORTATION (1978)

U. S. Department of Energy, Technical Information Center;
P. O. Box 62; Oak Ridge, TN 37830
Price: free Level: 3

In this unit, students learn about the relationship between energy and transportation in the neighborhood, community, and nation. Classification activities, picture studies, and other developmental approaches are used.

ENERGY CALENDAR

Energy and Man's Environment; 0224 S. W. Hamilton, Suite 301;
Portland, OR 97201
Price: $4.00 Level: 7-12

The Energy Calendar is designed for the classroom. It contains projects, activities, quotations, and information intended to interest students and encourage investigation of energy and conservation topics.

THE ENERGY CHALLENGE (1976)

U. S. Department of Energy, Technical Information Center;
P. O. Box 62; Oak Ridge, TN 37830
Price: free Level: 5-8

This is an interdisciplinary unit that focuses on energy history, the present energy picture, and future energy alternatives. Teacher guides and 24 spirit masters are included.

3. Instructional Material

ENERGY CONSERVATION ACTIVITY PACKETS (1977)

Project Writer: Ruth Bakke
Iowa Energy Policy Council; 215 E. 7th; Des Moines, IA 50319
Price: $10.00 (entire set) Level: K-6
$ 2.00 (individual units)
$ 4.50 (filmstrips)

Five individual packets (3-ring notebooks) for grades K-2, 3, 4, 5, and 6, and two filmstrips for grades 5 and 6 make up this unit of interdisciplinary activities which encourage the development of a conservation ethic. Activities, annotated student and teacher bibliographies, worksheets, and visuals are organized in separate binders according to grade level.

ENERGY CONSERVATION EDUCATION: AN ACTION APPROACH

Council on the Environment of New York City;
51 Chambers St., Room 51; New York, NY 10007
Price: Contact source for price information. Level: 4-9

This curriculum unit involves teachers and students in classroom, school building, neighborhood, and home conservation projects. Included in the unit are 13 lessons, 2 wall charts, and spirit masters.

ENERGY CONSERVATION IN THE HOME (1977)

U. S. Department of Energy, Technical Information Center;
P. O. Box 62; Oak Ridge, TN 37830
Price: Contact source for price information. Level: 10-12

This volume is designed specifically as a curriculum guide for home economics teachers. It covers all phases of energy conservation in the home, from architectural design to life-style, and contains numerous activities, charts, diagrams, and illustrations.

3. Instructional Material

ENERGY DEVELOPMENT AND DISTRIBUTION (1978)

Foundation for Economic Education; 30 S. Broadway;
Irvington-on-Hudson, NY 10533
Price: $2.50 Level: 10-12

This is a packet of debate materials, including back issues of the Foundation's monthly journal, *The Freeman*, which contains articles on energy; a 14-page booklet, *Pages from U. S. Energy History*; and reprints on the energy problem. The materials were assembled for use by high school debate teams.

ENERGY, ENGINES, AND THE INDUSTRIAL REVOLUTION (1977)

U. S. Department of Energy, Technical Information Center;
P. O. Box 62; Oak Ridge, TN 37830
Price: free Level: 8-9

Two study units make up this packet. "The Giant Step of the Industrial Revolution" covers the years 1700-1860 with a focus on energy, while "The Great Joule Robbery" discusses the contribution of the heat engine (gasoline and diesel engines and steam turbines) to the Industrial Revolution.

ENERGY FLOW CHARTS (1973)

Environmental Action Reprint Service; Box 545;
La Veta, CO 81055
Price: $ .20 Level: 7-12
(quantity discount available)

This is a 4-page set of charts that depicts the relative importance of various sources of energy, ways in which energy is utilized, and compares used energy to wasted energy. Such charts could accompany classroom units in math, science, or economics.

3. Instructional Material

ENERGY, FOOD, AND YOU: ELEMENTARY; ENERGY, FOOD, AND YOU: SECONDARY

Authors: T. Angell, C. Peterson, et al.
Energy, Food, and You Program; Washington State Office of Environmental Education; c/o Shoreline District Offices; 158th & 20th Ave., N. E.; Seattle, WA 98155
Price: $5.00 Level: 1-12

These interdisciplinary curriculum guides include ideas and activities about the relationship between food and energy. Topics covered include the sources and uses of energy, global food and energy problems, energy resources and the U. S. food system, energy-efficiency and good nutrition, and ways to use energy resources wisely through home gardens.

ENERGY IN THE GLOBAL MARKETPLACE

U. S. Department of Energy; Technical Information Center; P. O. Box 62; Oak Ridge, TN 37830
Price: free Level: 10-12

This learning packet explores the role of energy in world trade and in the global balance of power. It examines the world's major energy "haves" and "have-nots" and investigates the processes by which energy prices are determined.

ENERGY/POLLUTION (1976)

Author: Stephen A. Huth
Chicago Tribune Educational Services, Order Fulfillment Dept.; 435 N. Michigan, Room 261; Chicago, IL 60611
Price: free Level: 10-12

This instructional aid provides an analysis of our energy problems and their impact on the drive to wipe out pollution. Classroom activities are included.

3. Instructional Material

ENERGY PUPPETS (1979)

Authors: Mary Webb, David Chesebrough, Emmanual Sillman, teachers from Energy Workshops
Conservation Consultants; 417 Thorne St.;
Sewickley, PA 15143
Price: $1.00 Level: K-3

This curriculum activity is designed to teach students what energy is and why energy conservation is important. Puppets and cartoon strips are used as teaching vehicles.

ENERGY RESOURCES: HOW MUCH LEFT? (1979)

Authors: Mary Webb, David Chesebrough, Emmanual Sillman, teachers from Energy Workshops
Conservation Consultants; 417 Thorne St.;
Sewickley, PA 15143
Price: $1.00 Level: 4-9

This curriculum unit is designed to enable students to compute the length of time energy resources will last based on a 1976 Bureau of Mines forecast. An activity master and transparencies on products made from coal and petroleum are included.

ENERGY RESOURCES OF TEXAS CURRICULUM MATERIALS--UNIT I: ENERGY FROM START TO FINISH (1977)

Author: Jay Earl Anderson, Jr.
Bureau of Economic Geology, University of Texas at Austin;
University Station, Box X; Austin, TX 78712
Price: Contact source for price information. Level: 7-12

This publication consists of 130 loose-leaf pages of curriculum materials for teachers and students which were prepared for use with the "Energy Resources of Texas" map (51" x 41" map is included as part of teaching unit). It includes a suggested teaching schedule, discussion of opening teaching strategies, 4 modules of subject matter, evaluation suggestions, field trip ideas, and supplementary materials sources.

3. Instructional Material

ENERGY TRANSFER (1979)

Authors: Mary Webb, David Chesebrough, Emmanual Sillman,
teachers from Energy Workshops
Conservation Consultants; 417 Thorne St.;
Sewickley, PA 15143
Price: $1.00 Level: 4-9

This activity teaches students about the different kinds of energy and their transformations from one form to another. An activity master game is included.

THE ENERGY WE USE (1977)

U. S. Department of Energy, Technical Information Center;
P. O. Box 62; Oak Ridge, TN 37830
Price: free Level: 1

This material provides a basic introduction to energy sources. Study units include "Energy in Wind", which involves a pinwheel parade to show the energy of the wind; and "The Sun", in which students watch two plants to see how the sun gives them energy.

ENVIRONMENT AND ENERGY PACKET (1976)

National Science Teachers Association;
1742 Connecticut Ave., N. W.; Washington, D. C. 20009
Price: $3.00 Level: 1-6

This packet contains 13 teaching aids, including 3 posters; booklets on coal, natural gas, oil, and nuclear energy; and a cardboard model of an electric utility system. The accompanying teacher's guide includes 5 lesson plans and an extensive resource listing.

3. Instructional Material

EXPLORING WITH SOLAR ENERGY

Authors: Thomas H. Metos and Gary G. Bitter
Julian Messner Division, Simon and Schuster;
1230 Ave. of the Americas; New York, NY 10020
Price: $6.97 Level: 3-6

In this 64-page book the history of the use of solar energy is traced from ancient times to the present, and its possibilities for the future are projected. The book includes experiments and model-building to help young people understand how solar energy works.

FOLLOW THE THREE R'S (1979)

Authors: Mary Webb, David Chesebrough, Emmanual Sillman, teachers from Energy Workshops
Conservation Consultants; 417 Thorne St.;
Sewickley, PA 15143
Price: $1.00 Level: 7-9

This is a curriculum activity designed to teach students that recycling saves energy. Activity suggestions are included.

FOOD AND ENERGY II (Booklet or Slide Program)

Food and Energy Council; 909 University Ave.;
Columbia, MO 65201
Price: $1.00 (booklet) Level: 7-12
$55.00 (slide program)
(quantity discount available)

Available in either booklet or slide program (127 slides with accompanying audiotape), Food and Energy II puts the critical interdependence of food production and energy use into proper focus. It tells how we must utilize short-term replacements for oil and gas, principally coal and uranium, to generate electrical energy for future food production until alternative energy sources--solar, wind, geothermal, and tidal power--can be fully developed.

3. Instructional Material

HOW A BILL BECOMES A LAW TO CONSERVE ENERGY (1977)

U. S. Department of Energy, Technical Information Center;
P. O. Box 62; Oak Ridge, TN 37830
Price: free Level: 9, 11-12

"Case Study of a Bill", one of the study units included in this packet, describes how the 55 mph speed limit became law and takes the student through the lawmaking process. "A Congressional Hearing" allows students to play typical roles at a hearing on a national speed limit bill in a simulation game.

HOW DO I USE ENERGY? (1979)

Authors: Mary Webb, David Chesebrough, Emmanual Sillman, teachers from Energy Workshops
Conservation Consultants; 417 Thorne St.;
Sewickley, PA 15143
Price: $1.00 Level: K-3

This curriculum activity is designed to show students how man can save energy by doing his own work instead of relying on machines to work for him. Work sheets are included.

IDEAS AND ACTIVITIES FOR TEACHING ENERGY CONSERVATION (1977)

The University of Tennessee, Environment Center;
South Stadium Hall; Knoxville, TN 37916
Price: Contact source for price information. Level: 7-12

This is a curriculum guide with historical perspectives on energy resources and energy conservation. The ideas and activities section of the guide includes lessons in science, social studies, communication/language arts, and multidisciplinary activities.

3. Instructional Material

INDUSTRY VS. GOVERNMENT: THE GREAT DEBATE

Authors: Mary Webb, David Chesebrough, Emmanual Sillman, teachers from Energy Workshops
Conservation Consultants; 417 Thorne St.;
Sewickley, PA 15143
Price: $1.00 Level: 10-12

This activity involves students in a debate on the issue of whether government regulation or the principle of supply and demand is more effective in promoting energy conservation. An activity master is included.

INTERCOM 84/85: EDUCATION FOR A WORLD IN CHANGE: A WORKING HANDBOOK FOR GLOBAL PERSPECTIVES (1976)

Center for Global Perspectives; 218 E. 18th St.;
New York, NY 10003
Price: $3.50 Level: K-12

This multi-level curriculum guide provides lessons on the "Herman Races" and the future. It examines Americans' attitudes toward the energy problem.

INVENTORY OF OPINION RELATING TO PETROLEUM AND ENERGY SUPPLY TO THE U. S. ECONOMY (1975)

Author: Samuel Dix
Energy Education Publishers; P. O. Box 6488;
Grand Rapids, MI 49506
Price: $2.00 Level: 10-12

This manuscript, which is most appropriate for college-bound students, is a progressive response procedure aimed at developing an understanding of the conflict between energy realities and the present state of political and economic thinking. It should provide a basis for class discussion or independent study and research.

3. Instructional Material

IS THERE A FUTURE? (1979)

Authors: Mary Webb, David Chesebrough, Emmanual Sillman, teachers from Energy Workshops
Conservation Consultants; 417 Thorne St.;
Sewickley, PA 15143
Price: $1.00 Level: 10-12

This curriculum unit poses a set of questions which should lead to student discussions of immediate and future responses that will affect energy usage. An activity master is provided.

IT ALL STARTS WITH THE SUN (1979)

Authors: Mary Webb, David Chesebrough, Emmanual Sillman, teachers from Energy Workshops
Conservation Consultants; 417 Thorne St.;
Sewickley, PA 15143
Price: $1.00 Level: 4-9

This curriculum activity is designed to teach students that all energy sources can be traced to the sun. A transparency and activity master are included.

KILOWATT COUNTER: A CONSUMER'S GUIDE TO ENERGY CONCEPTS

Institute for Local Self-Reliance; 1717 18th St., N. W.;
Washington, D. C. 20009
Price: $2.25 Level: 10-12

This 36-page booklet is an introduction to the principles of energy use and economics. It contains many tips for saving energy at home as well as charts and quiz exercises for classroom use.

3. Instructional Material

MATHEMATICS IN ENERGY (1978)

U. S. Department of Energy, Technical Information Center;
P. O. Box 62; Oak Ridge, TN 37830
Price: free Level: 8-9

This packet is designed to infuse energy issues into junior high math classes. The unit deals with a wide range of energy math including conversions, statistics, and the manipulation of energy units (BTU's, watts, calories, etc.).

MY HOME: SAVING OR WASTEFUL (1979)

Authors: Mary Webb, David Chesebrough, Emmanual Sillman, teachers from Energy Workshops
Conservation Consultants; 417 Thorne St.;
Sewickley, PA 15143
Price: $1.00 Level: 4-9

This curriculum activity is designed to help students discover ways to save energy in their homes. An activity master is included.

THE NATURAL LAWS OF ENERGY (1979)

Authors: Mary Webb, David Chesebrough, Emmanual Sillman, teachers from Energy Workshops
Conservation Consultants; 417 Thorne St.;
Sewickley, PA 15143
Price: $1.00 Level: K-3

This curriculum activity is designed to teach students about the natural laws of energy. Nursery rhymes, songs, and stories are used.

NETWORKS: HOW ENERGY LINKS PEOPLE, GOODS, AND SERVICES (1978)

U. S. Department of Energy, Technical Information Center;
P. O. Box 62; Oak Ridge, TN 37830
Price: free Level: 4-5

Six interdisciplinary lessons make up this packet. The units investigate energy networks such as electrical circuits, sources, conversions, and end use consumption.

3. Instructional Material

NUCLEAR EXPERIMENTS YOU CAN DO . . . FROM EDISON

Thomas Alva Edison Foundation; 143 Cambridge Office Plaza,
18280 W. Ten Mile Rd.; Southfield, MI 48075
Price: $ .50 Level: 10-12
(quantity discount available)

This booklet explains basic facts about nuclear energy and its potential as an energy source. Experiments are included which clearly demonstrate the principles of atomic power.

THE REAL COST OF A REFRIGERATOR (1979)

Authors: Mary Webb, David Chesebrough, Emmanual Sillman, teachers from Energy Workshops
Conservation Consultants; 417 Thorne St.;
Sewickley, PA 15143
Price: $1.00 Level: 4-9

This activity teaches students how to calculate the cost of an appliance using life cycle costing and total energy concepts. An activity master is included.

SCIENCE ACTIVITIES IN ENERGY (1977)

U. S. Department of Energy, Technical Information Center;
P. O. Box 62; Oak Ridge, TN 37830
Price: free Level: 4-6
4-12

This series of simple, hands-on science experiments is designed to help students learn about various forms and sources of energy. File-folder units have the following titles: "Chemical Energy--Science Activities in Energy", "Conservation--Science Activities in Energy", "Electrical Energy--Science Activities in Energy", "Solar Energy I--Science Activities in Energy", "Wind Energy--Science Activities in Energy" (grades 4-6), and "Solar Energy II--Science Activities in Energy" (grades 9-12).

3. Instructional Material

SOLAR ENERGY AND ITS USES (1976)

Institute of Environmental Sciences; 940 E. Northwest Highway;
Mt. Prospect, IL 60056
Price: $4.50 Level: 7-12

This full-color wall chart depicts the potential use of solar energy. Highlights include an energy-use graph and descriptions of a solar house, solar furnace, and satellite solar power station.

SOLAR ENERGY EDUCATION PACKET FOR ELEMENTARY AND SECONDARY STUDENTS (1978)

Editor: Beth Wagner
Center for Renewable Resources;
1028 Connecticut Ave., N.W., Suite 1100, Dept. ED;
Washington, D. C. 20036
Price: $3.76 Level: K-12

This is a 60-page collection of interdisciplinary solar activity descriptions, reading assignments, and background materials with over 25 simple project outlines designed to illustrate all forms of renewable resources--sun, wind, water, and biomass. Creativity and student participation are emphasized; and a thorough, annotated solar bibliography is included.

SOLAR ENERGY PROJECT

Superintendent of Documents, U. S. Government Printing
Office; Washington, D. C. 20402
Price: Prices range from $1.70 to $2.75. Contact G.P.O. for further information. Level: 7-12

This is a set of introductory solar activities with a teacher's guide, text, and reader. The set is designed to be used in all basic science classes.

3. Instructional Material

STEPPING STONES POSTER (1978); URBAN ECOTOPIA POSTER (1976); SUBURBAN ECOTOPIA POSTER (1976)

Artist: Diane Schatz
Rain Publications; 2270-B N. W. Irving;
Portland, OR 97210
Price: $3.00 each Level: 7-12

These detailed posters illustrate total community self-reliance through alternative energy and appropriate technology. The posters can serve as a basis for discussion and are suitable for coloring.

STUDENT LEARNING ACTIVITY MODULES

Lee County Schools, Environmental Education Center;
2055 Central Ave.; Fort Myers, FL 33901
Price: Contact source for price information. Level: K-8

The Student Learning Activity Modules are short, 2-5 day teaching units which can be used to effectively engage students in environmental education. The energy crisis is a major emphasis of these modules, which contain lesson plans, background information for the teacher, student hand-outs, and transparency masters.

THE SUN AS THE PRIME ENERGY SOURCE (1979)

Authors: Mary Webb, David Chesebrough, Emmanual Sillman, teachers from Energy Workshops
Conservation Consultants; 417 Thorne St.;
Sewickley, PA 15143
Price: $1.00 Level: K-3

All animals and plants need energy from the sun to do work. This curriculum activity helps students recognize the importance of the sun in their daily lives.

3. Instructional Material

SUN FUN COLORING BOOK (1978)

Author: Loren Schultz
Alternative Energy Resources Organization (A.E.R.O.);
435 Stapleton Building; Billings, MT 59101
Price: $ .75 Level: 1-6

This is a coloring book on various forms of alternative energy sources, including wind, solar, and geothermal. Projects, games, and cut-outs are included.

TEACHER'S PACKET

Editor: Betsy Kraft
Education Division, National Coal Association;
1130 17th St., N. W.; Washington, D. C. 20036
Price: free Level: 1-12

This packet contains booklets, a map, and wall charts which tell how coal is formed and describe modern coal mining and transportation methods. Suggestions for developing a classroom unit on coal are included.

TILLY'S CATCH-A-SUNBEAM COLORING BOOK: SOLAR HEAT, BOOK I (1975)

Natural Power, Inc.; Francestown Turnpike;
New Boston, NH 03070
Price: $1.50 Level: 2-4

This coloring book provides children with an introduction to solar energy. Topics covered include the sun and its uses and how solar heat works in the home.

3. Instructional Material

TIMED METER READING (1979)

Authors: Mary Webb, David Chesebrough, Emmanual Sillman, teachers from Energy Workshops
Conservation Consultants; 417 Thorne St.;
Sewickley, PA 15143
Price: $1.00 Level: 4-9

This curriculum activity is designed to teach students how to locate and read their home electric meters and compute their family's electricity usage during a week. An activity master is included.

TRANSPORTATION AND THE CITY (1977)

U. S. Department of Energy, Technical Information Center;
P. O. Box 62; Oak Ridge, TN 37830
Price: free Level: 8-9

"Shut Down by Tin Lizzie", one of the study units included in this packet, describes how small American towns decline as a result of the automobile. "The City of Windshields" describes Los Angeles, the city that the automobile built.

TWO ENERGY GULFS

U. S. Department of Energy, Technical Information Center;
P. O. Box 62; Oak Ridge, TN 37830
Price: free Level: 7-9

This unit discusses the vital, oil-producing Persian and Mexican Gulfs. A comparison of the cultures of the two areas and their energy production is provided.

U. S. ENERGY POLICY--WHICH DIRECTION? (1978)

U. S. Department of Energy, Technical Information Center;
P. O. Box 62; Oak Ridge, TN 37830
Price: free Level: 11-12

This unit is designed as a companion to "How a Bill Becomes a Law to Conserve Energy". It concentrates on the executive branch of government and the various forces that go into making energy policy.

3. Instructional Material

WIND ENERGY THROUGH POETRY (1979)

Authors: Mary Webb, David Chesebrough, Emmanual Sillman, teachers from Energy Workshops
Conservation Consultants; 417 Thorne St.;
Sewickely, PA 15143
Price: $1.00 Level: K-3

This activity teaches students uses of air in doing helpful work and to make up poems about the wind. A story is included.

YOUR ENERGY WORLD (1978)

U. S. Dept. of Energy, Technical Information Center;
P. O. Box 62; Oak Ridge, TN 37830
Price: free Level: 4-6

Your Energy World is a 4-unit set of activities designed to give students a chance to directly examine energy concerns and to provide an opportunity for personal involvement with them. Using an interdisciplinary approach to energy education, the set includes 18 spirit masters which can be adapted to an on-going curriculum in science, social studies, language arts, mathematics, and art.

4. Catalogues, Bibliographies, and Reference Material

ADOBE: A COMPREHENSIVE BIBLIOGRAPHY (1979)

Author: Rex C. Hopson
The Lightning Tree; P. O. Box 1837; Santa Fe, NM 87501
Price: $6.95

Because of its heat retention and transference properties, adobe has undergone a rebirth as a building material, particularly in passive solar designs. This bibliography contains over 2,000 book and journal citations covering the history, technology, applications, construction, manufacturing, and design of adobe buildings.

ALTERNATIVE SOURCES OF ENERGY: A BIBLIOGRAPHY OF SOLAR, GEOTHERMAL, WIND, AND TIDAL ENERGY, AND ENVIRONMENTAL ARCHITECTURE

Authors: Barbara and David Harrah
The Scarecrow Press; 52 Liberty St.; Metuchen, NJ 08840
Price: $8.00

This bibliography lists books, articles, and other information sources on solar, geothermal, wind, and tidal energy. Included in 6 sections are materials dealing with alternate energy sources in general and their specific applications for practical use; and with architectural incorporation of solar and wind energy systems into commercial, industrial, and residential buildings.

AWARD-WINNING ENERGY EDUCATION ACTIVITIES (1977)

Editor: Helen M. Carey
U. S. Department of Energy; Technical Information Center;
P. O. Box 62; Oak Ridge, TN 37830
Price: free

This booklet contains brief descriptions of the winning entries to the National Science Teachers Association Teacher Participation Contest conducted in 1976. The contest sought ideas which would fit easily into standard science and nonscience courses at various grade levels to further student understanding of important energy issues.

4. Catalogues, Bibliographies, and Reference Material

DIRECTORY OF THE SOLAR INDUSTRY (1975)

Author: Richard Livingstone
Total Environmental Action, Inc.; Church Hill;
Harrisville, NH 03450
Price: $4.00

Four hundred seventy-one organizations concerned with solar and wind energy, photovoltaics, bioconversion and ocean gradients, energy technology, design, and engineering services are listed in alphabetical order. The directory is also coded by areas of interest.

ENERGY: A GUIDE TO ORGANIZATIONS AND INFORMATION RESOURCES IN THE UNITED STATES (Second Edition, 1978)

Public Affairs Clearinghouse; P. O. Box 10;
Claremont, CA 91711
Price: $20.00

This is a 221-page directory describing 1,500 public and private organizations concerned with energy in the United States. It is organized by subject and contains 18 pages of indexes.

ENERGY: A MULTIMEDIA GUIDE FOR CHILDREN AND YOUNG ADULTS (1979)

Editor: Judith Higgins
ABC-CLIO Press; Riviera Campus, 2040 A. P. S., Box 4397;
Santa Barbara, CA 93103
Price: $14.95

This book contains 195 pages of information useful for designing or amending energy curricula and for building a book and media collection of energy materials appropriate to any grade level. Contact source for further information regarding specific needs.

4. Catalogues, Bibliographies, and Reference Material

ENERGY ACTIVITIES FOR THE CLASSROOM (1976)

Authors: Herbert Coon and Michelle Alexander
ERIC/SMEAC Information Reference Center;
Ohio State University, College of Education;
1200 Chambers Rd., 3rd Floor; Columbus, OH 43212
Price: $4.50

This sourcebook (ERIC Code ED 130 833) contains energy teaching activities for all grade levels and subject areas. Most of the activities were developed or suggested by public school teachers.

ENERGY AND EDUCATION: TEACHING ALTERNATIVES (1978)

Editor: Fredrick E. Posthuma
National Education Association; Academic Building,
Saw Mill Rd.; West Haven, CT 06516
Price: $5.95

Energy and Education: Teaching Alternatives contains sections on a broad range of basic energy-related questions including nuclear and solar power, solid waste, aerosol, the relationship between leisure and energy, and energy consumption. With 2 complete mini-units and a list of selected materials, this publication can serve as the basic handbook and resource tool for teachers of all grade levels, regardless of content area.

THE ENERGY AND ENVIRONMENT BIBLIOGRAPHY (1978)

Friends of the Earth Foundation; 124 Spear St.;
San Francisco, CA 94105
Price: $3.50

This guide to energy information lists and describes books, periodicals, organizations, and government agencies concerned with energy. It includes categories for energy education, conservation, nuclear power, solar energy, appropriate technology, and citizen action.

4. Catalogues, Bibliographies, and Reference Material

ENERGY CATALOG #10 (1978)

Environmental Action Reprint Service (EARS); Box 545;
La Veta, CO 81055
Price: free

This catalogue lists books, pamphlets, reprints, etc., which deal with clean alternatives to fossil and nuclear energy, and also includes materials for teaching energy issues and energy policy. Prices for individual items range from less than $1.00 to $10.00 each; materials suitable for all grade levels and subjects are available.

ENERGY DIRECTORY AND BIBLIOGRAPHY

New York State Alliance to Save Energy; 36 W. 44th St.;
New York, NY 10036
Price: $2.50

This bibliography is a reference guide for those interested in energy conservation, alternative energy sources, and energy-conscious life-styles. It lists books, magazines, and pamphlets written for energy-aware consumers.

ENERGY EDUCATION BIBLIOGRAPHY (1977)

Energy and Man's Environment; 0224 S. W. Hamilton, Suite 301;
Portland, OR 97201
Price: $4.00

This bibliography is an annotated list of 130 key energy and conservation education materials from all sectors. The bibliography was prepared in cooperation with the University of Tennessee Environment Center and contains citings of materials with demonstrated educational value for all levels.

ENERGY FILMS CATALOG

U. S. Department of Energy, Technical Information Center;
P. O. Box 62; Oak Ridge, TN 37830
Price: free

This catalogue describes more than 190 energy films offered through the T.I.C. All are available on a free loan basis.

4. Catalogues, Bibliographies, and Reference Material

ENERGY FILMS INDEX

Energy and Man's Environment; 0224 S. W. Hamilton, Suite 301;
Portland, OR 97201
Price: $4.00

Energy films are catalogued and described in this index, and source information is provided. Citations provide complete information to enable the teacher or curriculum planner to evaluate the relevance of each film to individual needs.

ENERGY INFORMATION RESOURCES (1975)

Editor: Patricia L. Brown, et al.
American Society for Information Science;
1155 16th St., N. W., Suite 215; Washington, D. C. 20036
Price: $18.50

This volume lists the names and locations of several hundred collections of energy-related materials. Telephone numbers and information on accessibility of materials are provided, and about 100 energy-related periodicals are listed.

ENERGY ON FILM

New York State Alliance to Save Energy; 36 W. 44th St.;
New York, NY 10036
Price: $3.00

Entries on over 160 energy-related films make this bibliography a valuable resource for those planning educational programs on energy. A brief description of each film is included, as well as information on audience level, source, purchase and rental prices, length, and availability in a second language.

4. Catalogues, Bibliographies, and Reference Material

ENERGY PRIMER

Editors: Richard Merrill and Thomas Gage
Dell Publishing Co., Inc., Educational Sales Department;
P. O. Box 3000; Pine Brook, NJ 07058
Price: $7.95

This guide to alternate energy focuses on small-scale systems that can be built by and serve the needs of an individual or small group. Solar heaters, windmills, water wheels, methane digesters, and many other renewable energy technologies are included.

ENERGY RESOURCES: A SELECT ANNOTATED BIBLIOGRAPHY (1978)

Authors: Alan Goldwasser and Tom Pollard
University of Kansas, Independent Study;
Continuing Education Building, 645 New Hampshire;
Lawrence, KS 66044
Price: Contact source for price information.

This bibliography provides several hundred citations on energy resources with brief annotations from magazine and newspaper articles, books, and government documents. The bibliography includes several areas related to energy: the history of the energy situation, natural resources, alternative energy sources, governmental action, energy consumers, and others interested in energy.

ENERGY--SELECTED RESOURCE MATERIALS FOR DEVELOPING ENERGY EDUCATION/CONSERVATION PROGRAMS (1978)

Authors: Jonathan M. Wert and Barry K. Worthington
National Wildlife Federation, Department EEM;
1412 16th St., N. W.; Washington, D. C. 20036
Price: free Level: Teacher

This 36-page booklet contains a selected list of available resource materials useful in developing energy education/conservation programs. There are materials applicable to most grade levels and subject areas.

4. Catalogues, Bibliographies, and Reference Material

ENERGY SOURCES, 78/79

Editor: Rita Blome
Enercom; 909 17th St., Suite 601; Denver, CO 80202
Price: $10.95

Energy Sources, 78/79 contains information on publicly-held energy producing companies operating in the Rocky Mountain region. There is information on oil and gas exploration, coal, uranium, geothermal and solar energy, and conservation, plus the political, social, and economic factors affecting energy development.

ENVIRONMENTAL QUALITY (1978)

Producer: Council on Environmental Quality
Superintendent of Documents; U. S. Government Printing Office; Washington, D. C. 20402
Price: Contact source for price information.

This annual report of the Council on Environmental Quality contains a large section devoted to energy issues as they impact on environmental issues. It is a good source of facts and figures concerning current energy development and its environmental cost.

GEOTHERMAL WORLD DIRECTORY (1978)

Editor: Karen L. Darwin
Geothermal World Corporation; 18014 Sherman Way, #169; Reseda, CA 91335
Price: $45.00

This reference guide to geothermal energy contains thousands of listings, including commercial firms, government agencies, journals and periodicals, universities, scientists, and consultants. It features maps and photos of recent geothermal discoveries, projects and important encyclopedic articles on special aspects such as financing, construction, and management.

4. Catalogues, Bibliographies, and Reference Material

INFORMAL DIRECTORY OF ORGANIZATIONS AND PEOPLE INVOLVED IN THE SOLAR HEATING OF BUILDINGS (1975)

Author: W. A. Shurcliff
Total Environmental Action, Inc.; Church Hill;
Harrisville, NH 03450
Price: $7.50

This is a compendium of individuals and groups involved in solar heating, with explanations of what they do. It includes government agencies, commercial firms, professional societies, foundations, individual engineers, architects, inventors, homeowners, and writers.

NASSP BULLETIN; September, 1978

National Association of Secondary School Principals;
1904 Association Dr.; Reston, VA 22091
Price: Contact source for price information.

The September, 1978, NASSP Bulletin contains 8 articles dealing with several phases of energy education. Write to the Association for further information regarding availability of copies of this issue.

NATIONAL SOLAR ENERGY EDUCATIONAL DIRECTORY (1979)

Superintendent of Documents; U. S. Government Printing
Office; Washington, D. C. 20402
Price: $4.75

This directory offers information on approximately 1,200 solar-related courses and over 160 solar programs and curricula developed by colleges, universities, and vocational schools (wind, biomass, and ocean thermal systems were considered as solar technologies). To order, specify stock number 061-000-00210-3.

4. Catalogues, Bibliographies, and Reference Material

NUCLEAR INFORMATION CATALOGUE #9

Environmental Action Reprint Service (EARS); Box 545;
La Veta, CO 81055
Price: free

This catalogue offers books, films, and many pamphlets enumerating the dangers of nuclear power. Many of the pamphlets are available in classroom quantities for less than $ .20 each.

OIL AND GAS POCKET REFERENCE (1978)

National Supply Co., Marketing Department, ;
1455 West Loop South; Houston, TX 77027
Price: free

This is a 36-page recap of oil industry economics. Included are statistics on national and international oil and gas reserves, production and depletion rates, as well as conversion tables and a glossary of industry terms.

OILFIELDS OF THE WORLD (Second Edition, 1976)

Author: E. N. Tiratsoo
Gulf Publishing Co., Book Division; P. O. Box 2608;
Houston, TX 77001
Price: $32.50

Best suited as a research or reference aid, the 1976 edition of Oilfields of the World examines in detail known world oil reserves and future trends in consumption. It emphasizes the need for great technical expertise and massive capital investments in order to find new deposits of crude oil.

RAINBOOK (1977)

Rain Publications; 2270-B N. W. Irving;
Portland, OR 97210
Price: $7.95

Rainbook is a comprehensive resource book on appropriate technology. Fully indexed and illustrated, it lists groups, contacts, literature, and other sources of information on alternative energy and related conservationist ideas.

4. Catalogues, Bibliographies, and Reference Material

THE RESOURCE FILE: PRACTICAL PUBLICATIONS FOR ENERGY MANAGEMENT (1978)

Superintendent of Documents; U. S. Government Printing
Office; Washington, D. C. 20402
Price: $3.50

This is a reference guide to handbooks, curricula, and audio-visual materials that deal basically with energy conservation. While many of the materials cited deal with energy-saving procedures for commercial and government installations, there is a large number of listings for materials that would be suitable for classroom use.

RESOURCES IN EDUCATION (January, 1979; February, 1979)

ERIC/SMEAC Information Reference Center; Ohio State
University, College of Education; 1200 Chambers Rd.;
Columbus, OH 43212 (Note: ERIC services are available in most major libraries.)

Resources In Education, produced by ERIC (Educational Resources Information Center), provides annotations for all new entries in the ERIC microfiche file. The editions for January and February, 1979, list 40 resources which are suitable for energy education, either as direct classroom teaching aids, or as sources of material for curriculum design.

SELECTED DEPARTMENT OF ENERGY PUBLICATIONS (1978)

U. S. Department of Energy, Technical Information Center;
P. O. Box 62; Oak Ridge, TN 37830
Price: free

This booklet describes many free publications available from the Department of Energy. The focus is on conservation of current energy supplies and potential future energy sources.

4. Catalogues, Bibliographies, and Reference Material

THE SOLAR AGE CATALOG (1977)

Brick House Publishing Co.; Church Hill;
Harrisville, NH 03450
Price: $8.50

The Solar Age Catalog is a guide to solar products, manufacturers, and services, with contributions by recognized solar authorities. The catalogue would be useful for ordering materials for alternative energy projects in science or vocational arts.

THE SOLAR BUYER'S GUIDE AND DIRECTORY OF THE SOLAR INDUSTRY (1978)

Author: Dick Livingstone
Solar Data; 13 Evergreen Rd.; Hampton, NH 03842
Price: $20.00
(quantity discount available)

This annual publication lists approximately 3,000 organizations in the U. S. involved in solar activities, recorded alphabetically by name, and categorized into sections according to types of products and services available. Also included is a state-by-state listing of agencies and information sources.

SOLAR ENERGY BIBLIOGRAPHY FOR ELEMENTARY, SECONDARY, AND COLLEGE STUDENTS (1979)

Center for Renewable Resources;
1028 Connecticut Ave., N. W., Room 1100, Dept. ED;
Washington, D. C. 20036
Price: $2.50

This is an up-to-date, annotated listing of publications and audiovisual materials on renewable resources--sun, wind, water, and biomass. Only materials adaptable to classrooms and workshops are included.

4. Catalogues, Bibliographies, and Reference Material

SOLAR ENERGY BOOKS

National Solar Energy Education Campaign; 10762 Tucker St.;
Beltsville, MD 20705
Price: $4.50

This catalogue contains over 450 titles of reading material on solar energy and energy conservation. Materials can be found for all grade levels and subject areas.

SOLAR ENERGY CATALOGUE

Centerline Co.; 401 S. 36th St.; Phoenix, AZ 85034
Price: free with self-addressed, stamped envelope

This is a brochure listing approximately 80 individual publications dealing with solar energy--what it is, how it can be used. Materials suitable for all grade levels are included.

SOLAR ENERGY DIRECTORY, 1978-79

Centerline Co.; 401 S. 36th St.; Phoenix, AZ 85034
Price: $12.50

This is a list of national and international solar energy associations, architects, manufacturers, contractors, educators and educational materials, newsletters, and research on alternative energy sources. Included is a 43-page alphabetical index of solar energy companies in the United States.

SOLAR ENERGY HANDBOOK (1977)

Editor: Paul A. Fleck
Time-Wise Publications; P. O. Box 4140; Pasadena, CA 91106
Price: $4.45

This book is an overview of the solar energy field, complete with tables, conversion factors, and standards. It includes extensive bibliographies, references, and directories.

4. Catalogues, Bibliographies, and Reference Material

SOLAR ENERGY PROGRESS (1977)

Business Communications Co., Inc.; P. O. Box 2070C,
  9 Viaduct Rd.; Stamford, CT 06906
Price: $35.00 (quantity discount available)

This volume can serve as a basic reference for those wishing to know what is happening in the field of solar energy. An analysis of various other energy alternatives is also included.

SOLAR ENERGY WORKSHOPS (1976)

Jesse R. Slome; 32-29 Parsons Blvd.; Flushing, NY 11354
Price: $1.25

Information is provided for holding a solar energy workshop for elementary and junior high school students. Teachers may find this material helpful in introducing solar energy to their students and in furthering student interest in solar power.

SUN ANGLES FOR DESIGN (1978)

Author: Robert Bennett
Robert Bennett, Architect and Engineer; 6 Snowden Rd.;
  Bala Cynwyd, PA 19004
Price: $5.00 (quantity discount available)

This book, containing many photographs, is a basic reference guide on sun angles for those interested in solar energy applications in the design of buildings. It explains solar orientation, solar time, solar site analysis, and contains charts and easily readable solar data for locations in North America, Europe, the Middle East, and Asia.

4. Catalogues, Bibliographies, and Reference Material

THE SUN CATALOG (1979)

Editor: Joseph H. Deahl
Solar Usage Now, Inc.; Box 306, 420 E. Tiffin St.;
Bascom, OH 44809
Price: $2.00

The SUN Catalog is a 260-page resource catalog of solar and alternative energy hardware. It includes experiments and materials on solar energy that are specifically designed for classroom use, covering such topics as heat transfer, solar energy storage, flat-plate collectors, solar energy measurement, insulation, and applications for solar energy.

TECH DATA SHEETS

Food and Energy Council; 909 University Ave.;
Columbia, MO 65201
Price: $ .05 each, minimum order 100

The following data sheets are available as energy education materials: Conserve Energy with Energy-Efficient Motors, which gives technical data relevant to the study of efficiency in electric motors and is suitable for high school students; and Electric Energy Projects and Learning Kit Resources, which lists suppliers and prices of various teaching aids and projects in electric energy suitable for use in elementary through high school grades. Further information on the latter data sheet is available from source upon request.

WHERE TO FIND INFORMATION ABOUT SOLAR ENERGY (1979)

U. S. Department of Energy, Office of Public Affairs;
Washington, D. C. 20585
Price: free

This booklet gives addresses of organizations which provide information on solar energy. A description of the services provided by each organization is included.

D. Energy Information Sources

1. Federal Sources

COMMUNITY SERVICES ADMINISTRATION

National Center for Appropriate Technology (NCAT)
Box 3838
Butte, MT 59701

Working primarily through Community Action Programs and Community Development Councils, the NCAT produces and disseminates various types of technical information on renewable energy sources, principally solar, wind, and methane. Renewable energy curriculum units for grades 1-12 are available at small cost.

DEPARTMENT OF AGRICULTURE

Cooperative State Research Services
U. S. Department of Agriculture
Washington, D. C. 20250

The CSRS can provide the results and products of agricultural energy use research to educators through State Agricultural Experiment Station Directors. Much of the information available would be useful to agriculture teachers.

DEPARTMENT OF COMMERCE

Economic Development Administration
Department of Commerce
Washington, D. C. 20230

Under Title III of the Economic Development Act, the University Center program can provide information and assistance for vocational training in installation, repair, and maintenance of energy equipment for buildings. For information about the University Center Programs, contact regional Economic Development Act offices.

1. Federal Sources

Institute of Applied Technology Energy Program
Contact: Technical Information Center (TIC)
P. O. Box 62
Oak Ridge, TN 37830

The Institute of Applied Technology conducts research and supports national energy conservation by providing technical information on energy efficiency improvements. Some of the information available might be useful in schools wishing to study large-scale energy conservation.

National Technical Information Service (NTIS)
425 13th St., N. W., Room 620
Washington, D. C. 20004

NTIS is the central source for the public sale of government-sponsored research and development reports and other analyses prepared by federal agencies or their contractors. NTIS is also a central source for federal machine processable data files.

DEPARTMENT OF DEFENSE

D. O. D. Dependent Schools, Education Division
Office of the Director
Hoffman Building, Room 172
2461 Eisenhower Ave.
Alexandria, VA 22331

D. O. D. Dependents Schools develops K-12 energy curricula and teacher in-service programs designed to foster an energy conservation ethic. Materials and methods developed are available to the general public.

DEPARTMENT OF ENERGY

Education Programs Division
Department of Energy (Mail Stop 8G-031)
Washington, D. C. 20585

The Education Programs Division provides support for development of curriculum materials and teacher training programs in energy education. Materials developed are available to the general public from DOE's Technical Information Center.

1. Federal Sources

Energy Extension Service
20 Massachusetts Ave., Room 2221C
Washington, D. C. 20545

The following states are conducting pilot EES programs: Connecticut, Pennsylvania, Tennessee, Alabama, Texas, Wyoming, New Mexico, Michigan, Wisconsin, Washington. The purpose of these programs is to provide information and assistance to people and organizations in their efforts to adopt energy-saving measures.

Solar Energy Research Institute
Public Information Office
1536 Cole Boulevard
Golden, CO 80401

The Solar Energy Research Institute, in addition to conducting major solar research projects, offers a growing collection of solar information and educational material. Teachers are encouraged to request information by writing to the above address, or by calling toll-free (800) 231-1825.

Technical Information Center (TIC)
P. O. Box 62
Oak Ridge, TN 37830

The TIC holds and disseminates all D. O. E. research and information reports. Information available to the public includes curriculum materials for grades K-12, various educational pamphlets and booklets, and information on programs to develop alternative energy systems. Many free items are listed in Selected Department of Energy Publications, available at the above address.

1. Federal Sources

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

National Solar Heating and Cooling Information Center
P. O. Box 1607
Rockville, MD 20850

The purpose of the National Solar Heating and Cooling Information Center is to encourage the use of solar technology throughout the general building market. A wide array of free information, including information on individual state solar education programs, is available by writing to the above address, or by calling the following toll-free numbers: (800) 523-2929 in Continental U. S. except Pennsylvania; (800) 462-4983 in Pennsylvania; and (800) 523-4700 in Hawaii and Alaska.

Technical Assistance Programs
Office of Community and Program Coordination
Department of H. U. D.
Washington, D. C. 21410

T. A. P. provides technical assistance and information to schools and other government agencies. Energy conservation and conversion to alternative energy systems are included in the program.

GENERAL SERVICES ADMINISTRATION

National Audiovisual Center
Washington, D. C. 20409

The National A-V Center makes films available for rental and other audiovisual materials available for purchase. For further information, request the Environmental/Energy Conservation Information List from the above address.

1. Federal Sources

OFFICE OF EDUCATION

Energy and Education Action Center
U. S. Office of Education
Reporters Building, Room 514
300 7th St., N. W.
Washington, D. C. 20202

The EEAC provides support and information to implement energy conservation in schools. The Center also promotes and disseminates energy education curricula and information on federal agencies and offices that can provide additional energy education materials.

Packaging and Dissemination
Contact: Deputy Commissioner (Packaging)
Office of Planning
or: Deputy Commissioner, Bureau of Elementary and Secondary Education (Dissemination)
U. S. Office of Education
Washington, D. C. 20202

The Offices of Packaging and Dissemination promote the wide dissemination and effective adoption of exemplary education programs identified by the OE/NIE Joint Dissemination Review Panel. Schools and other education agencies have access to such materials.

Projects in Environmental Education
Office of Environmental Education
Bureau of Elementary and Secondary Education
U. S. Office of Education
Washington, D. C. 20202

This program develops and disseminates curriculum materials in environmental education which often directly involve energy issues. The aim is to develop environmental and ecological awareness.

1. Federal Sources

SANDIA LABORATORIES

Public Information Division 3161
Albuquerque, NM 87185

Sandia Labs publishes pamphlets describing all current solar energy research projects being conducted at the New Mexico test facility. These are provided free of charge.

SUPERINTENDENT OF DOCUMENTS

U. S. Government Printing Office
Washington, D. C. 20402

The GPO publishes many books, booklets, and pamphlets which deal with energy issues in a basically nontechnical manner. A good source of information on such material is the monthly list, Selected U. S. Government Publications, available by writing to the above address.

TENNESSEE VALLEY AUTHORITY

Energy Education Program
Electrical Demonstration Branch
Division of Power Utilization
TVA, Chattanooga, TN 37401

The Energy Education Program provides materials for teacher training and develops electrical courses to be used in vocational-technical schools. Teacher workshops on energy issues are also conducted.

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2. State Sources

ALABAMA

State of Alabama
Department of Education
Basic Science Section
111 Coliseum Blvd.
Montgomery, AL 36109

ALASKA

State Division of Energy and Power Development
Energy Conservation Advocates Program
338 Denali
Anchorage, AK 99501

ARIZONA

Arizona Department of Education
1535 W. Jefferson
Phoenix, AZ 85007

ARKANSAS

State of Arkansas
Energy Conservation and Policy Office
960 Plaza West Building
Little Rock, AR 72205

CALIFORNIA

California State Department of Education
721 Capitol Mall
Sacramento, CA 95814

COLORADO

Colorado Department of Education
201 East Colfax Avenue
Denver, CO 80203

2. State Sources

DELAWARE

Delaware State Department of Public Instruction
Office of Science and Environmental Education
Townsend Building
Dover, DE 19901

FLORIDA

State of Florida
Department of Education
347 Miles Johnson Building
South Duval Street
Tallahassee, FL 32304

Florida State Energy Office
108 Collins Building
Tallahassee, FL 32304

GEORGIA

State of Georgia
Department of Education
Office of Instructional Services
State Office Building
Atlanta, GA 30334

IDAHO

State of Idaho
Office of Energy
Statehouse
Boise, ID 83720

ILLINOIS

State Board of Education
Illinois Office of Education
100 North First Street
Springfield, IL 62777

2. State Sources

Illinois Institute of Natural Resources
Division of Alternative Energy
222 South College
Springfield, IL 62706

INDIANA

Indiana Department of Public Instruction
Division of Curriculum
Room 229, State House
Indianapolis, IN 46204

IOWA

Iowa Department of Public Instruction
Grimes State Office Building
Des Moines, IA 50319

Iowa Energy Policy Council
215 East 7th Street
Des Moines, IA 50319

KENTUCKY

Kentucky Department of Education
Capitol Plaza Tower
Frankfort, KY 40601

LOUISIANA

State of Louisiana
Department of Education
P. O. Box 44064
Baton Rouge, LA 70804

MARYLAND

Maryland State Department of Education
P. O. Box 8717, BWI Airport
Baltimore, MD 21240

2. State Sources

MASSACHUSETTS

Massachusetts Energy Office
73 Tremont Street
Boston, MA 02108

MICHIGAN

Energy Extension Service
Michigan Department of Commerce
P. O. Box 30004
Lansing, MI 48909

MINNESOTA

State of Minnesota
Department of Education
Capitol Square Building
550 Cedar Street
St. Paul, MN 55101

Minnesota Energy Agency
980 American Center Building
150 East Kellogg Boulevard
St. Paul, MN 55101

MISSISSIPPI

Mississippi Department of Education
P. O. Box 771
Jackson, MS 39205

MISSOURI

Missouri Department of Natural Resources
P. O. Box 1309
Jefferson City, MO 65101

2. State Sources

NEBRASKA

State of Nebraska
Department of Education
233 South 10th Street
Lincoln, NE 68508

Nebraska Energy Office
4th Floor, 301 South Centennial Mall
P. O. Box 95085
Lincoln, NE 68509

NEW HAMPSHIRE

Division of Instruction
New Hampshire Department of Education
64 North Main Street
Concord, NH 03301

NEW JERSEY

New Jersey State Department of Education
225 West State Street
Trenton, NJ 08625

NEW MEXICO

New Mexico State Department of Education
Capitol Complex
Education Building
Santa Fe, NM 87503

NEW YORK

New York State Energy Office
Agency Building 2
Empire State Plaza
Albany, NY 12223

2. State Sources

NORTH CAROLINA

State of North Carolina
Department of Public Education
Division of Science Education
Raleigh, NC 27611

OHIO

Ohio Department of Energy
30 East Broad Street, 34th Floor
Columbus, OH 43215

OREGON

State of Oregon
Department of Education
942 Lancaster Drive, N. E.
Salem, OR 97310

PENNSYLVANIA

Commonwealth of Pennsylvania
Department of Education
Box 911
Harrisburg, PA 17126

Commonwealth of Pennsylvania
Governor's Energy Council
State Street Office Building
Harrisburg, PA 17101

RHODE ISLAND

State of Rhode Island And Providence Plantations
Department of Education
199 Promenade Street
Providence, RI 02908

2. State Sources

SOUTH CAROLINA

South Carolina Office of Energy Resources
1205 Pendleton Street
Edgar A. Brown Building
Columbia, SC 29205

TENNESSEE

Tennessee Energy Authority
707 Capitol Boulevard Building
Nashville, TN 37219

TEXAS

Texas Education Agency
Division of Curriculum Development
201 E. 11th Street
Austin, TX 78701

UTAH

Utah State Board of Education
250 E. Fifth South
Salt Lake City, UT 84111

VIRGINIA

Commonwealth of Virginia
Office of Emergency and Energy Services
310 Turner Road
Richmond, VA 23225

WASHINGTON

Washington State Office of Environmental Education
158th and 20th Ave., N. E.
Seattle, WA 98155

2. State Sources

WEST VIRGINIA

West Virginia Fuel and Energy Office
1262-1/2 Greenbrier Street
Charleston, WV 25311

3. General Sources

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

1515 Massachusetts Avenue, N. W.
Washington, D. C. 20005

In addition to the specific items cited in this inventory, the AAAS maintains a collection of tapes, microfilm, microfiche, and films, many of which deal with energy. Catalogues with descriptions and costs of all materials are available from the above address.

AMERICAN AUTOMOBILE ASSOCIATION

8111 Gatehouse Road
Falls Church, VA 22042

The AAA makes available booklets, brochures, and other printed material that explain gas-saving ideas for the automobile. Most materials are inexpensive (less than $ .20 each) and adaptable to classroom use, especially for driver education classes.

AMERICAN GAS ASSOCIATION

1515 Wilson Blvd.
Arlington, VA 22209

The AGA serves as a clearinghouse for information on the natural gas industry. A list of inexpensive educational materials, "Teaching Aids About Gas," is available by writing to the above address.

THE AMERICAN JEWISH COMMITTEE

165 East 56th St.
New York, NY 10022

The American Jewish Committee offers at nominal cost a variety of booklets, pamphlets, workbooks, and other materials (some specifically designed for educational use) dealing with energy policy, production, and conservation. Write to the above address for further information on availability and price.

3. General Sources

AMERICAN PETROLEUM INSTITUTE

Publications and Distribution Section
2101 L Street, N. W.
Washington, D. C. 20037

The API offers low-cost brochures, publications, reports, and other materials dealing with petroleum recovery, environmental concerns, marketing and pricing practices, petroleum product quality, and many other relevant, petroleum-related issues. The Publications and Materials Catalogue and A Guide to Information Resources, which are available from the above address, contain detailed descriptions and price information on all material.

AMERICAN PRINTING HOUSE FOR THE BLIND, INC.

P. O. Box 6085
Louisville, KY 40206

The American Printing House for the Blind produces a wide selection of large-print and braille books and other learning materials on all topics, including science and energy. For complete information on services offered and prices, write to the above address.

AMERICAN PUBLIC POWER ASSOCIATION

Publications Department
2600 Virginia Avenue, N. W.
Washington, D. C. 20037

The APPA publications catalogue, which can be obtained by writing to the above address, describes 57 low-cost books, booklets, manuals, brochures, and special services that are available from the association. The emphasis of this material is on home energy awareness and conservation, and most of it is highly adaptable to classroom settings.

3. General Sources

AMOCO TEACHING AIDS

MC 3705
P. O. Box 5910-A
Chicago, IL 60680

Amoco distributes a number of free or low-cost booklets, classroom activity guides, and source lists which cover such energy topics as petroleum exploration and production, alternative energy sources, and energy conservation. A complete description of available materials may be obtained from the address listed above.

ANNUAL REVIEWS, INC.

4139 El Camino Way
Palo Alto, CA 94306

Annual Reviews, Inc. publishes reference works which contain a wide variety of authoritative review articles with many references. All phases of energy supply, distribution, cost, policy, environmental impact, conservation, and international implications are covered at varying levels of technical difficulty.

ASSOCIATION OF AMERICAN RAILROADS

Office of Information and Public Affairs
1920 L Street, N. W.
Washington, D. C. 20036

As an efficient user of energy and a carrier of coal, the railroads are directly involved in energy issues. By writing to the above address and indicating grade level and subject interest, educators can obtain free printed materials on topics such as transportation fuel efficiency and the movement of coal.

3. General Sources

ATOMIC INDUSTRIAL FORUM, INC.

Public Affairs and Information Program
7101 Wisconsin Avenue
Washington, D. C. 20014

The Atomic Industrial Forum offers audiovisual materials and free or inexpensive brochures and pamphlets on general energy topics, with an emphasis on nuclear energy. Write to the above address for further information on availability and cost.

THE BELL SYSTEM

The Bell System offers free booklets and wall posters for grades 1-6 dealing with energy issues, principally home energy conservation. Contact any Bell System office for information on local availability.

BREEDER REACTOR CORPORATION

Information Services
P. O. Box U
Oak Ridge, TN 37830

The Breeder Reactor Corporation supplies free information on the Clinch River Breeder Reactor Project. This material, in the form of booklets and pamphlets, is applicable to grades 7-12 and covers plant layout, environmental issues, public health concerns, and other topics relevant to the Liquid Metal Fast Breeder Reactor (L.M.F.B.R.).

CENTER FOR INFORMATION ON AMERICA

P. O. Box 3
Washington, CT 06793

The Center for Information on America publishes several low-cost booklets which cover various aspects of the energy issue, including alternative energy sources, coal, and nuclear power. Further information may be obtained by writing to the above address.

3. General Sources

CHANNING L. BETE CO., INC.

45 Federal Street
Greenfield, MA 01301

The Channing L. Bete Company, publishers of scriptographic booklets, offers several titles on energy--present energy sources and recovery methods, alternative sources, and conservation. The booklets are inexpensive (less than $1.00 each with substantial discounts for quantity orders), simple, and easily adaptable to classroom situations in elementary levels and beyond.

CITIZENS' ENERGY PROJECT

1413 K Street, N. W., 8th Floor
Washington, D. C. 20005

Citizens' Energy Project is a non-profit organization dedicated to promoting alternative energy and appropriate technology. Pamphlets, books, bibliographic and educational materials are available at nominal cost from the above address.

CITIZENS UNITED FOR RESPONSIBLE ENERGY

1342 30th Street
Des Moines, IA 50311

CURE maintains a list of organizations, individuals, and materials (mostly audiovisual) that deal primarily with solar energy. Contact the above address for information on availability and pricing.

COMMITTEE FOR NUCLEAR RESPONSIBILITY, INC.

P. O. Box 11207
San Francisco, CA 94101

The Committee for Nuclear Responsibility makes available the opinions and research of distinguished scientists, physicians, and philosophers on the health, environmental, and economic hazards of nuclear energy. This printed material, available for about $ .07 per sheet, is a rebuttal to pro-nuclear arguments and supports solar energy and the conservationist viewpoint.

3. General Sources

CONSERVATION CONSULTANTS

417 Thorne Street
Sewickley, PA 15143

In addition to the items cited in this inventory, Conservation Consultants, a non-profit organization, offers a wide variety of free and inexpensive curriculum materials (including some audio-visual materials) designed for use in environmental and energy education. Write to the above address for details regarding availability and price.

EARTHMIND

4844 Hirsch Road
Mariposa, CA 95338

Earthmind is a non-profit organization offering books and other information on alternative sources of energy--principally wind systems--which can be adapted for use at most grade levels. For further information, write to the above address and enclose a stamped, self-addressed envelope.

EDISON ELECTRIC INSTITUTE

Educational Services
90 Park Avenue
New York, NY 10016

Edison Electric Institute, whose member companies (investor-owned public utilities) supply electricity to most parts of the country, offers free booklets which answer the most commonly-asked questions regarding electrical generation from coal and nuclear power. These educational materials, which may or may not be free, are often available from member companies on a local basis.

3. General Sources

ELECTRIC POWER RESEARCH INSTITUTE (EPRI) INFORMATION SERVICE

3412 Hillview Avenue
P. O. Box 10412
Palo Alto, CA 94303

Through its Information Service, EPRI, a large association of electric utilities, produces many publications and audiovisual materials on general energy topics. Speeches, reprints of journal articles, fact sheets, wall charts, films, and slide presentations are available.

ENERGY AND MAN'S ENVIRONMENT (EME)

0224 S. W. Hamilton, Suite 301
Portland, OR 97201

EME conducts a continuing development program of energy-focused resource and instructional materials for all grade levels. All materials are teacher-made and classroom-tested, with technical assistance provided by curriculum and energy specialists.

ENVIRONMENTAL INFORMATION CENTER

292 Madison Avenue
New York, NY 10017

The EIC offers a comprehensive set of services that make accessible an array of energy and environment information, including research reports, books, periodicals, speeches, names and addresses of public and private organizations involved in energy, and information on other factors affecting current energy issues. Write to the above address for further information (including cost) on services and materials such as *Energyfiche*, *Energy Directory Update*, *Solar Energy Update*, *Energy Information Abstracts*, and *The Energy Index*.

3. General Sources

ENVIRONMENTAL ACTION FOUNDATION

724 DuPont Circle Building
Washington, D. C. 20036

The Environmental Action Foundation distributes various books and reprints dealing with environmentally safe alternative energy sources and the interface between power industries and the public. Write to the above address for further information.

ENVIRONMENTAL ACTION REPRINT SERVICE

Box 545
La Veta, CO 81055

Environmental Action Reprint Service (EARS) makes available at nominal cost a variety of publications which describe practical alternative energy systems. Further information on all EARS publications and services is available at the above address.

ENVIRONMENTAL POLICY INSTITUTE

317 Pennsylvania Avenue, S. E.
Washington, D. C. 20003

The EPI offers several studies on various energy/environment issues. A list of these studies, copies of which cost from $1.00 to $4.00, can be obtained by writing to the above address.

EXXON COMPANY, U. S. A.

Public Affairs Department
P. O. Box 2180
Houston, TX 77001

Exxon publishes information in the form of articles and booklets on all types of energy sources. Write to the above address for details on availability and cost.

3. General Sources

INDIANA AND MICHIGAN ELECTRIC COMPANY

2101 Spy Run Avenue
Fort Wayne, IN 46801

Indiana and Michigan Electric Company (which operates Cook Nuclear Center) offers a variety of free and inexpensive posters and instructional materials that deal with nuclear energy and alternative sources of energy, such as the sun. Suggested activities and a teacher's guide accompany most materials.

INSTITUTE OF SCRAP IRON AND STEEL, INC.

1627 K Street, N. W.
Washington, D. C. 20006

The free publications of the Institute of Scrap Iron and Steel describe the energy, mineral, and environmental savings realized when scrap steel is recycled. Contact the Institute for details on availability of materials.

LAND (LEAGUE AGAINST NUCLEAR DANGERS)

LAND Educational Associates Foundation, Inc.
Route 6, Box 262
Stevens Point, WI 54481

LAND makes available an assortment of pamphlets, brochures, reprints, and research papers which explore the dangers of nuclear power. Most of this material is inexpensive ($ .10 to $2.00, with quantity discounts available) and can be used in various subjects and grade levels.

LEAGUE OF WOMEN VOTERS OF THE UNITED STATES

1730 M Street, N. W.
Washington, D. C. 20036

The League of Women Voters publishes many energy-oriented booklets, pamphlets, and brochures which can be easily used as teaching aids in secondary level classrooms. These materials deal with almost all aspects of the current energy debate and are usually available for less than $ .75 each.

3. General Sources

MASSACHUSETTS AUDUBON SOCIETY

Lincoln, MA 01773

The Massachusetts Audubon Society distributes inexpensive environmental and energy education materials. Many of these are in the form of alternative energy bibliographies which may be helpful in curriculum planning.

MEGATECH CORPORATION

29 Cook Street
Billerica, MA 01866

Megatech offers a wide range of projects, experiments, and audiovisual material specifically designed for educational use, enabling educators to provide hands-on experiences with alternative energy systems, including solar, wind, water, and nuclear. These materials, which are appropriate for grades 4-12, come preassembled or in kit form, and include study guides and suggestions for activities.

MINERAL INSULATION MANUFACTURERS' ASSOCIATION, INC.

382 Springfield Avenue, Suite 312
Summit, NJ 07901

The Mineral Insulation Manufacturers' Association distributes a slide program and a number of inexpensive pamphlets and other printed material which provide information on insulation, sound control, and energy-conserving investments for the homeowner. Teachers in a number of disciplines will be able to incorporate the information presented in these materials into their classes.

MINNESOTA ENVIRONMENTAL SCIENCES FOUNDATION, INC.

5430 Glenwood Avenue
Minneapolis, MN 55422

A number of classroom learning activities are available from the Minnesota Environmental Sciences Foundation for use in grades K-12. Many of the materials focus on energy education, and they are designed to provide important learning experiences for students.

3. General Sources

NATIONAL CENTER FOR RESOURCE RECOVERY, INC.

1211 Connecticut Avenue, N. W.
Washington, D. C. 20036

The National Center for Resource Recovery distributes a number of publications which provide information on energy recovery. Among the materials published is a glossary of terms and a booklet which provides a summary of resource recovery techniques.

NATIONAL COAL ASSOCIATION

Education Division
1130 Seventeenth Street, N. W.
Washington, D. C. 20036

The National Coal Association, in providing an exchange of information between industry and government, acts as a clearinghouse for data about coal and energy. Students and teachers are encouraged to direct inquiries regarding coal and energy issues to the above address.

NATIONAL COUNCIL FOR ENVIRONMENTAL BALANCE, INC.

P. O. Box 7732
Louisville, KY 40207

The National Council for Environmental Balance distributes many pamphlets, books, and booklets on energy. Single copies of the pamphlets are free, the booklets are available for $1.00 or $2.00, and prices of the books range from $3.95 to $16.95; more detailed information is available by contacting the NCEB at the above address.

NATIONAL RECREATION AND PARK ASSOCIATION

1601 N. Kent Street
Arlington, VA 22209

The NRPA periodically produces books and pamphlets which deal with energy issues as related to parks and recreational areas. For information on currently-available items, contact the Association at the above address.

3. General Sources

NATIONAL SCIENCE TEACHERS ASSOCIATION

1742 Connecticut Avenue, N. W.
Washington, D. C. 20009

NSTA materials are designed to provide direct classroom assistance to science teachers, and the Association has produced a substantial amount of material on energy issues. For complete information on the type, price, and quantity of material currently available, write to the above address.

NICEM--NATIONAL INFORMATION CENTER FOR EDUCATIONAL MEDIA and NICSEM--NATIONAL INFORMATION CENTER FOR SPECIAL EDUCATION MATERIALS

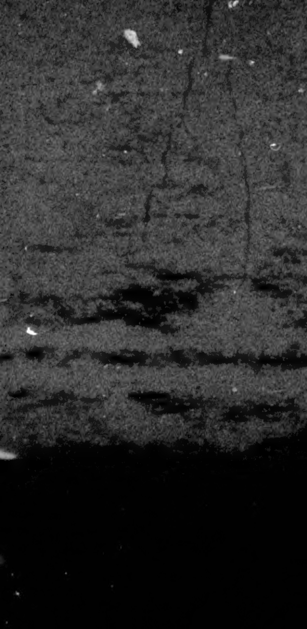
University of Southern California
University Park
Los Angeles, CA 90007

NICEM and NICSEM are computerized information services providing indexes to non-print educational materials, including materials concerned with energy/environment issues, which are applicable to students in specal education (NICSEM) and grades 1-12 (NICEM). Further information, including cost of the services, may be obtained by writing to the above address.

PEABODY COAL COMPANY

301 North Memorial Drive
St. Louis, MO 63102

Peabody Coal Company distributes a large amount of low-cost printed and audiovisual material on energy topics, including coal gasification, strip mining, land reclamation, and energy conservation. Further information concerning specific titles may be obtained by writing to the above address.



3. General Sources

PUBLIC INTEREST RESEARCH GROUP (PIRG)

1346 Connecticut Avenue, N. E.
Washington, D. C. 20036

With offices in most states, the Public Interest Research Group, an organization formed to promote consumer protection, conducts research on public policy issues, including energy. A publications list, containing over 60 titles of publications on energy policy, nuclear power, and alternate energy sources, is available from the above address.

REDDY COMMUNICATIONS, INC.

537 Steamboat Road
Greenwich, CT 06830

Reddy Communications, a public relations consulting firm for electric utility companies, offers several inexpensive, fully-illustrated booklets that support the use of coal and nuclear power to ease the energy crunch. The booklets are in easy-to-understand language and are aimed at a general audience.

RESOURCES FOR THE FUTURE

1755 Massachusetts Avenue, N. W.
Washington, D. C. 20036

Resources for the Future distributes books, transcripts, and other materials which deal with energy, renewable resources, and general topics relevant to the energy crisis. A current publications list may be obtained by writing to the above address.

SAN LUIS VALLEY SOLAR ENERGY ASSOCIATION

P. O. Box 1284
Alamosa, CO 81101

The San Luis Valley Solar Energy Association offers a variety of material, including manuals for building solar equipment (collectors, food dryers, etc.) and background information on various aspects of solar energy. Contact the source for price and availability information.

3. General Sources

SCIENTISTS' INSTITUTE FOR PUBLIC INFORMATION (S.I.F.P.I.)

355 Lexington Avenue
New York, NY 10017

S.I.F.P.I. publishes a substantial amount of material concerned with energy issues as they relate to such topics as economics and employment, the environment, nuclear safety, conservation, and alternative energy sources. Contact the Institute at the above address for information on availability, appropriate grade levels, and prices.

SHELL OIL COMPANY

Room 1535
One Shell Plaza
Houston, TX 77001

Shell offers an assortment of free and inexpensive booklets and pamphlets on issues such as oil exploration and consumption projections, and alternative energy possibilities. Many materials are specifically designed for classroom use and contain objectives and teaching suggestions.

SIERRA CLUB

530 Bush Street
San Francisco, CA 94108

The Sierra Club publishes many environmentally-oriented articles covering several aspects of the energy problem, including clean alternative energy sources. Information on the legal and political problems faced by environmentalists in opposing undisciplined coal and oil development is also available.

3. General Sources

STAPLES ENERGY CONSERVATION PROGRAM

Chicago Avenue and 5th Street, N. E.
Staples, MN 56479

The Staples Energy Conservation Program offers a series of teacher-developed curriculum units on energy conservation, each sold as a complete package and applicable to a specific level: primary, intermediate, junior/senior high. The junior/senior high packets are specific to the individual subject areas of science and math, home economics, social studies, and language arts. Contact source for complete details regarding availability and price.

THE UNIVERSITY OF TENNESSEE

Environment Center
South Stadium Hall
Knoxville, TN 37916

The Environment Center of the University of Tennessee offers a variety of materials for educational programs in energy and environmental issues. Write to the above address for information on specific materials that are currently available.

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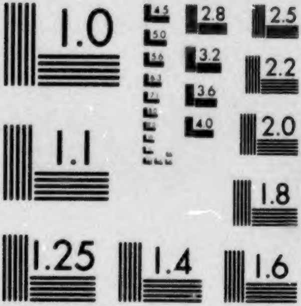
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